



The Rau Library



508.72
0617

(THE)
HISTORY
OF
MEXICO.

COLLECTED FROM
SPANISH AND MEXICAN HISTORIANS,
(FROM MANUSCRIPTS, AND
ANCIENT PAINTINGS OF THE INDIANS.)

TOGETHER WITH THE
CONQUEST OF MEXICO

BY
THE SPANIARDS,
(ILLUSTRATED BY ENGRAVINGS.)

WITH
CRITICAL DISSERTATIONS
ON THE
LAND, ANIMALS, AND INHABITANTS OF MEXICO.

By Abbé D. FRANCESCO SAVERIO CLAVIGERO.

TRANSLATED FROM THE ORIGINAL ITALIAN,
By CHARLES CULLEN, Esq.

IN THREE VOLUMES.

.....
VOL. III.

Philadelphia:

PUBLISHED BY THOMAS DOBSON, AT THE STONE HOUSE,
No. 41, SOUTH SECOND STREET.

1817.



219 508.72
261
1817
1.3
23
NMAH
.c617

CONTENTS

OF VOLUME III.

BOOK X.

| | |
|---|----|
| Review and march of the Spanish army to Tezcuco | 1 |
| Entry of the Spaniards into that court | 7 |
| Revolutions there | 8 |
| Dangerous expedition against Iztapalapan | 11 |
| Confederacy of Otompan, and other cities with the Spaniards | 12 |
| Transporting of the materials of the brigantines | 15 |
| Expeditions against Xaltocan and Tlacopan | 17 |
| Expeditions against Huaxtepec, Jauhtepec, and Jacapichtla | 20 |
| Fruitless negociation with the court of Mexico | 23 |
| March of the Spaniards through the southern mountains | 24 |
| Conquest of Quauhnahuac | 26 |
| Conquest of Xochimilco | 27 |
| March of the Spaniards round the lakes to Tezcuco | 31 |
| Conspiracy against Cortes | 32 |
| Last preparations for the siege of Mexico | 33 |
| Disposition of the army in the siege of the capital | 34 |
| Punishment of Xicotencatl | 36 |
| First Hostilities and beginning of the siege | 38 |
| First entry of the besiegers into the capital | 42 |
| Increase of the auxiliary troops of the Spaniards | 44 |
| New entries into the city | 46 |
| Confederacy of several cities of the lake against the Spaniards | 47 |
| Operations of Alvarado, and bravery of Tzilac atzin | 49 |
| Treachery of the Xochimilcas, and other people | 51 |
| Victory of the Mexicans | 52 |
| Engagement of the brigantines and stratagems of the Mexicans | 57 |
| Fruitless embassy to the king of Mexico | 58 |
| Expeditions against the Malinalchefe and Matlatzincas | 60 |
| Memorable actions of the general Chichimicatl, | 63 |
| Slaughter made in Mexico, and bravery of some women | 65 |
| Deplorable state of the Mexicans | 69 |
| Fruitless attempts to make them surrender | 71 |
| New conflict and horrid slaughter of the Mexicans | 72 |
| Last assault, and taking of the city and kings | 73 |

DISSERTATION I.

| | |
|--|-------|
| Concerning the first peopling of America, and in particular that of Mexico | 89 |
| Who were its first peoplers | 93 |
| How men and animals passed to America | 103 |
| DISSERT. II. On the principal epochs in the history of Mexico | 122 |
| DISSERT. III. On the land of Mexico | 146 |
| The pretended inundation of America | 149 |
| The climate of Mexico | 160 |
| The soil of Mexico | 177 |
| DISSERT. IV. On the animals of Mexico | 191 |
| The animals transported there from Europe | 228 |
| Catalogue of American quadrupeds | 243 |
| Species acknowledged by Buffon | ibid. |
| The species which he has not distinguished, but confused with others similar to them | 250 |
| The species of which he is ignorant, or unjustly denies to Ame- rica | 251 |
| DISSERT. V. On the physical and moral constitution of the Mexicans | 256 |
| Their corporeal and mental qualities | 257 |
| DISSERT. VI. On the degree of civilization and refinement of the Mexicans | 304 |
| The want of money | 306 |
| The use of iron | 310 |
| The art of building ships, bridges, and of making lime | 313 |
| The want of letters | 317 |
| The arts of the Mexicans | 331 |
| Their language | 346 |
| The laws of the Mexicans | 354 |
| Catalogue of European and Creole authors who have written in the languages of New Spain | 370 |
| Authors of Grammars and Dictionaries of these languages | 371 |
| DISSERT. VII. On the boundaries of the kingdoms of Ana- huac | 373 |
| Population | 380 |
| DISSERT. VIII. On the religion of the Mexicans | 399 |
| DISSERT. IX. On the Origin of the French Evil | 415 |

THE
HISTORY
OF
MEXICO.

BOOK X.

March of the Spaniards to Tezcuco ; their negotiations with the Mexicans ; their excursions and battles in the environs of the Mexican lakes ; expeditions against Ixcapichtlan, Quauhnahuac, and other cities ; construction of the brigantines ; conspiracy of some Spaniards against Cortes ; review, division, and posts, of the Spanish army ; siege of Mexico, imprisonment of king Quauhquemotzin, and fall of the Mexican empire.

CORTES, who never quitted the thought of the conquest of Mexico, attended most diligently, while in Tlascala, to the building of the brigantines and to the discipline of his troops. He obtained of the senate a hundred men of burden, for the transportation of the sails, cordage, iron, and other materials of the vessels, which he had unrigged the preceding year on purpose to equip the brigantines ; for tar he extracted a large quantity of turpentine from the pines on the great mountain Matlalcueje. He gave notice to the Huexot-

zincas, Cholulans, Tepejacheſe, and other allies, to prepare their troops and collect a large ſtore of provisions of every kind for a numerous army, which was to be employed in beſieging Mexico. When it appeared to him to be time to march, he made a review of his troops, which conſiſted of forty horſe and five hundred and fifty infantry. He divided this ſmall body of cavalry into four troops and the infantry into nine companies, ſome of them armed with guns, ſome with croſs-bows, ſome with ſwords and ſhields, and others with pikes. From the horſe on which he was mounted, while he was reviewing his troops and ordering the ranks, he made them this ſpeech: “ My friends and brave companions! any
“ diſcourſe which I might make to animate your zeal
“ would be altogether ſuperfluous, as we all acknow-
“ ledge ourſelves bound to repair the honour of our
“ arms, and to revenge the death of the Spaniards and
“ our allies: let us go to the conqueſt of Mexico, the
“ moſt glorious enterpriſe which can preſent itſelf to us
“ through life; let us go, to puniſh, with one ſtroke,
“ the perfidy, the pride, and the cruelty of our enemies;
“ to extend the dominions of our ſovereign, by adding
“ this large and rich domain to them; to pave the way
“ to religion, and open the gates of heaven to many
“ millions of ſouls; to gain with the labour of a few days
“ a competence for our families, and to render all our
“ names immortal; motives all capable of encouraging
“ even the moſt daſtardly minds, as well as your gene-
“ rous and noble hearts: I ſee no difficulty before us,
“ which your bravery may not overcome: our enemies
“ are indeed numerous, but we are ſuperior to them in
“ courage, in diſcipline, and in arms; beſides, we have
“ ſuch a number of auxiliaries under our command,

“ that

DSI

“ that we might conquer with their assistance not one
“ only, but many cities equal to Mexico: however strong
“ it may be, it is not yet so powerful as to withstand the
“ attacks we shall make upon it by land and water :
“ lastly, God, for whose glory we fight, has shewn a
“ disposition to prosper our designs; his providence has
“ preserved us in the midst of all our disasters and dan-
“ gers, has sent us new companions in the room of those
“ we have lost, and converted to our benefit the means
“ which our enemies employed for our ruin : what may
“ we not expect in future from his mercy ? let us con-
“ fide in him, and not render ourselves unworthy of his
“ protection by diffidence and pusillanimity.”

The Tlascalans, who endeavoured to imitate the discipline of the Spaniards, thought proper also to make a review of their troops before Cortes. The army was preceded by their martial music of horns, sea-shells, and other such wind instruments, after which came the four chiefs of the republic, armed with sword and shield, and adorned with most rich and beautiful plumes, which rose more than two feet above their heads; they wore their hair tied with fillets of gold, pendants of gems at their lips and ears, and shoes of great value upon their feet; behind them came their four shield-bearers, armed with bows and arrows; next the four principal standards of the republic appeared, each with its proper ensign wrought of feathers; then passed in regular ranks of twenty each the troops of archers, carrying at certain distances, the particular standards of their companies, every one of which was composed of three or four hundred men. They were followed by the troops, armed with swords and shields, and lastly, by the pikemen. Herrera and Torquemada affirm, that the archers amounted to sixty,
the

the pikemen to ten, and the others armed with swords, to forty thousand in number. Xicotencatl, the younger, made also an address to his troops, after the example of Cortes, in which he told them, that the next day, as had already been intimated, they were to march with the brave Spaniards against the Mexicans, their inveterate enemies; that although the Tlascalan name was sufficient to intimidate all the nations of Anahuac, they must exert themselves to acquire new glory from their actions.

Cortes, on his part, assembled the principal lords of the allied states, and exhorted them to constant fidelity to the Spaniards, exaggerating to them the advantages they might hope for, from the ruin of their enemy, and the evils they might dread, if ever from the suggestions of the Mexicans, or the fear of war, or fickleness of mind, they should violate their promised faith. He then published a military proclamation for the conduct of his troops, containing the following articles:

1st. No person shall blaspheme against God, nor the blessed Virgin, nor against the saints.

2d. No person shall quarrel with another, nor put his hand to his sword nor any other weapon, to strike him.

3d. No person shall game with his arms, or his horse, or iron tools.

4th. No person shall force any woman, under pain of death.

5th. No person shall take away the property of another, nor punish any Indian, unless he is his slave.

6th. No person shall make excursions from the camp without our permission.

7th. No person shall make any Indian prisoner, nor plunder his house, without our permission.

8th.

8th. No person shall ill use the allies, but, on the contrary, must exert every means to maintain their friendship.

And because it is of no service to publish laws, if the observance of them is not zealously attended to, and delinquents punished, he ordered two Moors, his slaves, to be hanged, because they stole a turkey and two cotton mantles. By these, and other similar punishments, he made his orders be regarded, which greatly contributed to the preservation of his troops.

After he had made all the dispositions which he thought would conduce to the happy issue of his enterprise, he at length marched with all his Spaniards, and a considerable number of the allies, on the 28th of December, 1520, having first heard mass, and invoked the Holy Spirit. He did not then choose to take the whole army of the allies with him, which had been reviewed the day before, both on account of the difficulty which there would be to maintain so numerous an army in Tezcucuo, and because he thought it necessary to leave the greater part of them in Tlascala to guard the brigantines, when it should be time to transport them. Of the three roads, which led to Tezcucuo, Cortes chose the most difficult, being wisely persuaded that the Mexicans would not expect him there, and his march would consequently be more safe. He proceeded therefore by Tetzmellocan, a village belonging to the state of Huexotzinco. On the 30th, they discovered, from the highest summit of those mountains, the beautiful vale of Mexico, partly with gladness because there lay the object of their desires; partly with some disgust, from the remembrance of their disasters. In beginning to descend towards that vale, they found the way obstructed with trunks and branches of trees laid across it designedly,
and

and were obliged to employ a thousand Tlascalans to clear it. As soon as they reached the plain, they were attacked by some flying troops of the enemy; but upon some of them being killed by the Spaniards, the rest fled. That night they quartered in Coatepec, a place about eight miles distant from Tezcuco; and the day following, as they were marching towards that capital, in some doubt and anxiety concerning the disposition of the Tezcucans, but at the same time resolved not to return without having taken some revenge of their enemies, they saw coming to them four respectable persons unarmed, one of them with a little golden flag in his hand; and Cortes recollecting that this was an ensign of peace, he advanced to confer with them. These four messengers were sent by king Coanacotzin to compliment the Spanish general, to invite him to the court, and to request him not to commit any hostilities in his states, which presented him the flag, containing thirty-two ounces of gold. Cortes, notwithstanding this shew of friendship, reproached them for the death they had a few months before been the cause of to forty-five Spaniards, five horses, and three hundred Tlascalans, who accompanied them loaded with gold, silver, and arms for the Spaniards who were then in Mexico, and executed with such inhumanity, that they had hung up the skins of the Spaniards, with their arms and habits, and those of the horses with their armour, as trophies in the temples of Tezcuco. He added, that although it was impossible to compensate the loss of his people, they must at least pay the gold and silver which they had robbed from them; that if they did not make the due satisfaction, he would, for every Spaniard they had killed, slay a thousand Tezcucans. The messengers answered, that the Mexicans, and
not

not the Tezcucans, under whose orders the Zoltepechese had acted, were blameable for that; but, notwithstanding, they would use every endeavour to make all be restored to him; and having taken polite leave of the Spanish general, returned in haste to Tezcuco with the news of the near arrival of the Spaniards at that court.

Cortes entered with his army into Tezcuco, on the last day of that year. Some nobles came out to meet him, and conducted him to one of the palaces of the late king Nezahualcojotl, which was so large, that not only the six hundred Spaniards were lodged in it, but, according to what Cortes says, it could have accommodated six hundred more. That general soon perceived the concourse of people in the streets remarkably diminished, as he thought he did not see the third part of the inhabitants which he had seen upon former occasions, and particularly observed that the women and children were out of the way, which was a manifest token of some evil disposition in that court. In order to lessen the distrust of the citizens, and avoid any accident to his own people, he published a proclamation, in which he forbade, under pain of death, any of his soldiers to leave their quarters without his permission. After dinner, they observed from the terraces of the palace a great number of people abandoning the city, some withdrawing to the neighbouring woods, and others to different places around the lake. The night following, the king Coanacotzin absented, transporting himself to Mexico by water, in spite of Cortes, who designed to have taken him, as he had formerly done, his three brothers Cacamatzin, Cuicuitzaczin, and Ixtlilxochitl. Coanacotzin could not pursue any other measure; for how was it possible he could think himself secure among the Spaniards, after
having

having seen what had happened to his brothers, and Montezuma his uncle? And particularly being apprehensive that many of his own subjects would take occasion to declare themselves his enemies, some from their fear of the Spaniards, or the particular interest of their families; others, to revenge the death of Cuicuitzaczin, and place Ixtlilxochitl on the throne.

The revolutions which happened in that court sufficiently justified the resolution he formed. Cortes was hardly three days in Tezcucó, when the lords of Huexotla, Coatlichan, and Atenco, three cities so near, as we have already mentioned, to Tezcucó, that they appeared like its suburbs, presented themselves to him, intreating him to accept their alliance and friendship. Cortes, who desired nothing more earnestly than to augment his party, received them kindly, and promised his protection. The court of Mexico, as soon as it knew of this change, sent a severe reprimand to those lords, telling them, that if their motive for adopting so base a measure was the fear which they had of the power of their enemies, it was fit for them also to know, that the Mexicans had still greater forces, by which they would soon see the Spaniards, with their favourite allies the Tlascalans, totally crushed; that if they had been obliged to it, for the interest of the states and possessions which they owned in Tezcucó, they might come to Mexico, where they would be assigned better lands. But those lords, instead of being intimidated with the reprimand, or yielding to the promises made them, seized the messengers, and sent them to Cortes. He demanded of them the purport of their embassy? To which they answered, that as they knew those lords to be in his favour, they had come to intreat them to be mediators for peace between
the

the Mexicans and the Spaniards. Cortes affected to believe what they told him, set them at liberty and charged them to tell their sovereign, that he did not wish for war, neither would wage it, if he was not compelled by hostilities from the Mexicans; that therefore the king should attend, and guard against offering any injury to the Spaniards, otherwise they would become his enemies, and infallibly ruin his capital.

The alliance of those cities was of no small importance to Cortes, but of all things it was most necessary to bring that court in his favour, both on account of the numerous nobility which it contained, and their influence on the other cities of the kingdom. From the first moment he entered that city he studied to gain their minds by every civility and courtesy, and enjoined the same thing to his people, forbidding most severely all kinds of hostility towards the citizens. He discovered, from the beginning, a party of the nobility favourable to the prince Ixtlilxochitl, whom he still kept confined for some purpose in Tlascala. He made him be brought to court by a strong party of Spaniards and Tlascalans, presented him to the nobility, and got them to acknowledge him king, and crown him with the same ceremonies and rejoicings usually made for their lawful sovereign. Cortes promoted his advancement as much to revenge himself of the lawful king Coanacotzin, as because the kingdom was dependent upon him. The people accepted him, either because they durst not oppose the Spaniards, or because they were tired of the government of Coanacotzin. Ixtlilxochitl was a youth of about twenty-three years; from the time of the first entry of the Spaniards into Tlascala he had declared himself openly for the Spaniards, had presented himself to Cortes with offers

of his army, and invited him to make his journey to Mexico by Otompan, where he was then encamped; but, in spite of his friendly intentions and obsequiousness, he was made prisoner by the Spaniards, when they came off in defeat from Mexico, and was confined in Tlascala until he was called to the throne. The circumstances of this event makes us believe, that his imprisonment was an honourable oppression of his liberty, coloured with one of those specious pretexts, which are usually invented by artful politicians, when, on account of some particular diffidence and distrust, they wish to render themselves secure. From long habit with the Spaniards he had become familiarised with their customs and manners. On the throne he had but the appearance of majesty; he was much less the lord of his subjects than minister of the pleasure of the Spaniards, to whom he rendered great services, not only in the conquest of Mexico, in which he served with his person and troops, but also in the rebuilding of that capital, for which he furnished some thousands of architects, masons, and labourers. He died extremely young, in 1523, and was succeeded in the sovereignty of Tezcucó by his brother Don Carlos, of whom afterwards we shall make honourable mention. By the advancement of Ixtlilxochitl, and the civilities shewn him by Cortes, the party of the Spaniards was considerably augmented, and all those families of Tezcucó which had absented from fear of hostilities from those strangers, finding themselves now secure, gladly returned to their houses.

Cortes was resolved to keep his quarters in Tezcucó, and had therefore busied himself in fortifying the royal palace, where his troops were lodged. He could not take any measure more conducive to his purposes. Tezcucó,

cuco, the capital of the kingdom of Acolhuacan, and a city of great extent, abounded with every sort of provision for the support of an army. It had good houses for their habitations, excellent fortifications for their defence, and plenty of artificers for every kind of labour they required. The dominions of Tezcucó also, from bordering on those of Tlascala, rendered the necessary communication with that republic more easy; the neighbourhood of the lake was of great importance for the construction of the brigantines, and the advantageous situation of that court gave the Spaniards a knowledge of all the movements of their enemies, without exposing them to their attacks.

After having arranged matters in Tezcucó, Cortes resolved to make an assault on the city of Iztapalapan, to revenge himself upon it and its citizens, for the offences received from their ancient lord Cuitlahuatzin, whom he knew to be the author of the memorable defeat of the first of July. He left a garrison of more than three hundred Spaniards, and many allies, under the command of Sandoval, in Tezcucó, and marched himself with upwards of two hundred Spaniards, and more than three thousand Tlascalans, and a great many of the Tezcucan nobility. Before they arrived at Iztapalapan, they were met by some troops of the enemy, who feigned to oppose their entry, fighting partly on land, and partly by water, but retiring as they fought, with a shew of not being able to withstand the attack. The Spaniards and Tlascalans thus employed in driving the enemy before them, entered the city, the houses of which they found in a great measure unpeopled, the citizens having withdrawn with their wives and children, and the greater part of their goods, to the houses which
they

they had upon the little islands in the lake; but there they were pursued by their enemies, who fought also in the water. The night was now well advanced, and the Spaniards, who were rejoicing at the victory which they believed they had obtained, were busied in sacking the city, and the Tlascalans were setting fire to the houses; but their gladness soon changed into terror, for by the same light of the burning of the city, they observed the water overflow the canals, and begin to lay the city under water. As soon as the danger was discovered, a retreat was sounded, and the city was in haste abandoned, in order to return to Tezcuco; but in spite of their diligence they came to a place where there was so much water that the Spaniards passed it with difficulty, and some of the Tlascalans were drowned, and the greatest part of the booty lost. Not one of them would have escaped with life, if, as Cortes affirms, they had continued three hours longer in the city; for the citizens, in order to drown all their enemies, broke the mole of the lake, and entirely deluged the city. The next day they continued their march along the lake, still harassed by the enemy. This expedition did not prove very agreeable to the Spaniards; but although they lost their plunder, and many were wounded, only two Spaniards and one horse died. The loss of the enemy was a great deal more; for, besides the ruin of their houses, upwards of six thousand of them, agreeably to the account made by Cortes, were slain.

The disgust, which this expedition gave to Cortes was soon compensated by the obedience which he received by means of their ambassadors from the cities of Mizquic, Otompan, and others in that quarter, alleging, in order to obtain his favour, that those states having been

been solicited by the Mexicans to take arms against the Spaniards, would never consent. Cortes, who was continually increasing his authority, the more he augmented his party, required from them, as a necessary condition for the obtainment of his alliance, that they should seize all the messengers who were sent to them from Mexico, and all the Mexicans who arrived at their cities. They, though not without the greatest difficulty, bound themselves to do so, and from that time forward were constantly faithful to the Spaniards.

This confederacy was immediately followed by that with Chalco, a considerable city and state on the eastern border of the lake of sweet water; for Cortes knowing that the Chalchese were disposed to adhere to his party, but dared not declare themselves for fear of the Mexican garrison in their state, sent Sandoval there with twenty horses, two hundred Spanish infantry, and a number of allies; but, previously, he ordered some Tlascalan troops to march, who were desirous of carrying home to their own country that part of the booty which they had brought off from Iztapalapan, and from thence to return towards Chalco, and drive the Mexicans from that state. Sandoval gave the vanguard to the Tlascalans; some Mexican troops, who were in ambush, charged suddenly upon them, threw them into disorder, killed some of them, and took their booty; but the Spaniards coming up, defeated the Mexicans and put them to flight. Having recovered their booty, the Tlascalans continued their journey in safety, and Sandoval marched towards Chalco; but long before he arrived at the city, the greatest part of the Mexican garrison came to meet him, which, as some historians affirm, consisted of twelve thousand men. A battle was fought, which lasted two hours, and concluded

concluded with the slaughter of many Mexicans, and the flight of the rest. The Chalchese, apprised of the victory, came with great rejoicing to meet the Spaniards, and introduced them in triumph into their city (*e*). The lord of that state, who had died a short time before of the small-pox, had, in the last moments of his life, warmly recommended it to his two sons to confederate with the Spaniards, to cultivate their friendship, and adopt Cortes for a father. In consequence of his last desire, those two youths repaired to Tezcuco, accompanied by the Spanish army, and many Chalchese nobles, presented the value of one hundred and fifty sequins in gold to Cortes, and established the alliance, to which they were always faithful. The cause of rebellion, so frequent among the people of that empire, was in some the fear of the Spanish arms, and the power of their allies; and in others, their hatred to, and impatience under, the Mexican yoke. It is impossible to expect constant fidelity from subjects who are rather influenced by terror than kindness. No throne can be more unstable than that which is supported by force of arms more than by the love of the people. Cortes, after caressing the two Chalchese youths, divided the state between them, either at their own request, or the suggestions of the nobility. He conferred on the eldest the principal city, and some other places; and on the youngest he settled Tlalmalco, Chimalhuaca, and Ajotzinco.

The

(*e*) Solis, in his account of this event, commits two geographical errors; first, he supposes the city of Chalco contiguous to Otompan, whereas the court of Tezcuco, and other considerable cities of the kingdom of Acolhuacan are between them, as we have shewn in our geographical chart of the Mexican lakes. Secondly, he says, that the states of Chalco and Tlascala bordered upon each other, whereas there is a wood of fifteen miles long, and a part of the dominions of Huexotzinco between them.

The Mexicans did not cease to make incursions into the states which had confederated with the Spaniards, but the diligence used by Cortes in sending succour to them, made their attempts generally fruitless. Amongst others, the Chalchese came in the space of a few days to request the assistance of the Spaniards; for they had learned that the Mexicans were preparing to strike a severe blow upon that state which had recently renounced subjection to them. Cortes could not at this time comply with their demand; for having now finished all the labour of the masts, the planks, and other apparatus of the brigantines, he had occasion for all his troops to transport them safely to Tezcuco. He advised the Chalchese, however, to make an alliance with the Huexotzincas, the Cholulans, and the Quauhquechollans. They objected to such a confederacy, on account of their ancient enmity to those people. The Chalchese were hardly departed, when three messengers came seasonably to Tezcuco from Huexotzinco and Quauhquechollan, sent by those lords to express their apprehensions, on account of certain smoke, observed by the centinels whom they had posted on the tops of the mountains, which was a strong indication of war, and to offer their troops to his command whenever he chose to make use of them. Cortes availed himself of this favourable opportunity to unite those states in alliance with that of Chalco, obliging them to lay aside for their common benefit any resentment subsisting between individuals. This alliance was so firm, that from that time forward they mutually assisted each other against the Mexicans.

It being now time to transport the timber, sails, cordage, and iron, for the brigantines, Cortes sent Sandoval with two hundred Spaniards and fifteen horses for that purpose,

purpose, charging him to go first to Zoltepec, and take ample revenge on those citizens for the slaughter of the forty-five Spaniards and three hundred Tlascalans, of whom we have already made mention. The Zoltepechefe, when they perceived this storm coming upon them, deserted their houses to save their lives by flight, but they were pursued by the Spaniards, and many of them killed, and others made slaves. From thence Sandoval marched to Tlascala, where he found every thing ready for the transport of the finished materials of the brigantines. The first brigantine was built by Martino Lopez, a Spanish soldier, who was an engineer in the army of Cortes, and was put to proof in the river Zahuapan. After that model the other twelve were built by the Tlascalans. The transport of them was executed with great rejoicing and expedition by the Tlascalans, the load appearing to them of little weight, which was to contribute to the ruin of their enemies. Eight thousand Tlascalans carried on their backs the beams, sails, and other materials, necessary for the construction of the brigantines; two thousand were loaded with provisions, and thirty thousand were armed for defence, under the command of the three chiefs Chichimecatl or Chichimecateuctli, Ajotecatl, and Teotepil or Teotlipil. This convoy occupied, according to Bernal Diaz, upward of six miles of space, from van to rear. When they set out from Tlascala, Chichimecatl commanded the vanguard, but whenever they got without the dominions of the republic, Sandoval gave him the rear-guard, fearing some attack from the enemy. This occasioned great disgust to the Tlascalan, who boasted of his bravery, alleging, that in all the battles in which he had ever been concerned, he had always, in example of his

his

his ancestors, taken the most dangerous post; and Sandoval was obliged to make use of arguments and entreaties to pacify him. Cortes, arrayed in his most splendid apparel, and accompanied by all his officers, came to meet them, and embraced and thanked those Tlascalan lords for their kind services. Six hours were spent in entering into Tezcucó in the best order, and with the cry of *Castile! Castile! Tlascala! Tlascala!* in the midst of the noise of the military music.

The general Chichimecatl was hardly arrived, when, without taking any rest after the fatigue of his journey, he requested Cortes to employ him and his troops against the enemy. Cortes, who waited for nothing else than the arrival of the auxiliary troops of Tlascala, to execute an expedition which he had been meditating for some time, after leaving a strong garrison in Tezcucó, and giving the proper orders for the completing of the brigantines, set out on his march in the beginning of spring 1521, with twenty-five horses, and six small pieces of artillery, three hundred and fifty Spaniards, thirty thousand Tlascalans, and a part of the Tezcucan nobility; and because he was afraid that the Tezcucans, whom he did not altogether trust, might give secret advice to the enemy and frustrate his designs, he left Tezcucó without publishing the object of his expedition. The army travelled twelve miles towards the north, and remained that night under the open sky. The next day it proceeded to attack Xaltocan, a strong city situated in the middle of a lake, with a road leading to it, cut like those of Mexico, with several ditches. The Spanish infantry, assisted by a considerable number of the allies, passed the ditches, through a thick shower of darts, arrows, and stones, by which many were

VOL. III. D wounded;

wounded; but the citizens not being able to endure longer the slaughter which the Spanish arms made of them, abandoned the city, and saved themselves by flight. The conquerors plundered the city, and set fire to some of the houses.

The day following they proceeded towards the large and beautiful city of Quauhtitlan, as Cortes justly calls it, but they found it depopulated; the citizens having been terrified by what had happened to Xaltocan, and betaken themselves to some place of security.

From thence they passed to Tenajocca, and to Azcapotzalco, and because they met with no resistance from any of those three cities they did them no hurt. At last they came to the court of Tlacopan, the limit which Cortes had proposed to himself for the expedition, where he meant to solicit some accommodation with the court of Mexico, and if that should not succeed, to inform himself in the neighbourhood of its designs and preparations. He found the citizens of that place disposed to dispute his entrance. They attacked the Spaniards with their usual fury, and fought courageously for some time; but at length becoming unable to withstand the fire of their guns, and the impetuosity of the horses, they retreated to the city. The Spaniards, on account of its being late, lodged in a large house of the suburbs. The next day the Tlascalans set fire to many houses of the city, and, during six days, which the Spaniards remained there, they had continual skirmishes, and some famous duels were fought between the Tlascalans and the citizens of Tlacopan; but they both fought with extreme bravery, and vented the hatred which they bore each other in a thousand reproaches. Those of Tlacopan called the Tlascalans the damsels of the Spaniards, with-

out

out whose protection they never would have dared to advance so near to that city. The Tlascalans answered in their turn, that the Mexicans, and all their partizans, rather ought to have the name of women given them; being so superior in number, and yet never able to subdue the Tlascalans. The Spaniards themselves did not escape from insults of this kind. They were ironically invited to enter Mexico to command there like lords, and to enjoy all the pleasures of life. "Do you think, "Christian," they said to Cortes, "that things will go on in the same way as they did last time? Perhaps you imagine there is another Montezuma reigning in Mexico devoted to your pleasures? Enter, enter the court, where you will all be made a sacrifice to the gods." During the engagements, which they had in those six days, the Spaniards entered that fatal road, and approached to those memorable ditches, where, nine months before, they had been so cruelly defeated. They found there a terrible resistance, and in an instant they apprehended to be utterly destroyed; for by being busied in pursuing some Mexican troops who had come designedly to insult them, and lead them into danger, they found themselves unexpectedly attacked, from both quarters on the road, by such a numerous enemy, that they with difficulty retreated, combating most furiously until they came to the main land. In this conflict five Spaniards were killed and many wounded. Of the Mexicans, many were slain in this and the other engagements. Cortes, disgusted with the ill success of his expedition, returned with his army by the same road to Tezcuco, suffering new insults from the enemy in his march, who ascribed his retreat to fear and cowardice. The Tlascalans, who accompanied the
Spaniards

Spaniards in their expedition, having amassed a large quantity of spoils, demanded permission of Cortes to carry them into their own country, which was readily granted.

Sandoval, who, in the absence of Cortes, had taken care of that post, departed from it two days after the arrival of that general, with twenty horses, three hundred Spaniards, and a great number of allies, to the succour of the Chalchefe, who were apprehensive of a strong assault from the Mexicans; but having found a great number of the troops of Huexotzinco and Quauhquechollan, who were come to their assistance, and knowing that the greatest damage was done to that city by the Mexicans, who were in the garrison of Huaxtepec, a city situated in the mountains, fifteen miles to the southward of Chalco, he proceeded there. On their march they were attacked by two great bodies of the enemy, but they quickly defeated them; this was owing in a great measure to the immense multitude of allies, whom the Spaniards took with them. They entered into Huaxtepec, and lodged themselves in some great houses of that city, to rest themselves and cure their wounded; but immediately they had a new assault from the Mexicans, and were compelled to take up arms again to repulse them. Having defeated and pursued them upwards of three miles until they were entirely routed, they returned to the city, where they halted two days. Huaxtepec was a city at that time famous not only for its excellent manufactures of cotton, but also for its wonderful garden, of which we have already made mention.

From Huaxtepec Sandoval sent messengers to offer peace to the inhabitants of Jacapichtla, a very strong place

place about six miles distant, situated on the top of a mountain, almost inaccessible to cavalry, and defended by a competent garrison of Mexicans; but his proposals being rejected, he marched towards that city, determined to strike a blow there, which would humble their pride, and for ever deliver the Chalchese from the evils which harassed them continually from that quarter. The Tlascalans, and other allies were intimidated by the sight of so much difficulty and danger; but Sandoval, animated by that great spirit which displayed itself in all his actions, resolved to conquer or die. He began to ascend with his infantry, having to surmount at the same time both the ruggedness of the mountain, and the multitude of the enemy, who defended it with a shower of darts and stones, some of which were of immoderate size, and although they broke in falling on the rocks between, wounded the Spaniards with the fragments; but nothing could restrain them from entering the city bathed in sweat and blood, after which example the allies did the same. The fatigue and their wounds inflamed their indignation so much, that they attacked the enemy with the utmost fury; who, to escape from their swords, fled down the precipices of the mountain. So much blood was spilt, that it purpled a little stream which ran there, and changed its waters so, that for more than an hour the conquerors could not use it to quench the thirst which distressed them (*f*); “This,” says

(*f*) Bernal Diaz ridicules Gomara for this account of the waters having been so discoloured with blood: but Diaz was not present at this expedition, and we ought therefore to give more faith to Cortes, who says, the slaughter which the Spaniards made of the enemy, and which the enemy made of themselves by precipitating themselves from that eminence, was so great, that all who were present affirm, that a little river which surrounded almost all that place, remained for upwards of an hour so tinged with blood that they could not drink of it.

says Cortes, "was one of the most signal victories, in which the Spaniards gave the strongest proofs of their courage and constancy." This day cost the life of Gonzalo Dominguez, one of the bravest soldiers Cortes had, and whose loss was most sensibly felt by them all.

The Mexicans were so enraged at the slaughter committed at Jacapichtla, that they sent twenty thousand armed men in two thousand vessels, against Chalco. The Chalchese implored as before the assistance of the Spaniards, and their messengers arrived just as Sandoval returned from Jacapichtla, with his army fatigued, exhausted, and wounded. Cortes ascribing too inconsiderately those repeated hostilities of the Mexicans against the Chalchese to some neglect of that unparalleled commander, without first enquiring into his conduct, hearing, or allowing him a moment of repose, commanded him to march immediately to Chalco with the soldiers who were least wounded, to the assistance of those allies. Sandoval was extremely disgusted with the slight offered him by his general, at the time he ought rather to have expected the greatest praises; but he had as much prudence in dissembling his sense of this injury, and as much readiness to obey, as he had shewn courage in that arduous enterprise. He set out without delay for Chalco; but when he arrived there he found the battle over, in which the Chalchese remained victorious, with the assistance of their new allies of Huexotzinco and Quauhquechollan; and although they sustained a considerable loss, they killed a number of the enemy and made forty prisoners, among whom were a general of the army and two persons of the first nobility, who were consigned by the Chalchese to Sandoval, and by him sent to Cortes. This general having discovered his error, and
being

being well informed of the irreprehensible conduct of Sandoval, endeavoured to appease his just resentment by particular marks of honour and esteem.

Cortés being desirous of an accommodation with the court of Mexico, both in order to avoid the fatigue and distresses of war, and to make himself master of so beautiful a city without ruining it, resolved to send those two persons who were prisoners with a letter to king Quauh-temotzin ; which, although it could not be understood by the court, as they were totally ignorant of the characters of it, would however be a credential and token of his embassy. He explained the contents of the letter to the messengers, and charged them to represent to their sovereign, that he pretended to nothing more than that the king of Spain should be acknowledged lord of that land, agreeably to what had been granted by the Mexican nobility in that respectable assembly which was held in Mexico, in presence of Montezuma; that they should remember the homage which the Mexican lords then did to the great monarch of the East ; that he wished to establish a peace, and to make a perpetual alliance with them, and was not disposed to war unless constrained to it by their hostilities ; that it would grieve him to spill so much Mexican blood, and destroy such a large and beautiful city ; that they themselves were witnesses of the bravery of the Spaniards, the superiority of their arms, the multitude of their allies, and the success of their enterprises ; that they should finally reflect within themselves, and not oblige by their obstinacy a war to be continued to the utter ruin of the court and the empire.

The fruit of this embassy was soon discovered in the lamentations of the Chalchefe, who knowing of the great force

force which was levying against their state, came to implore the assistance of the Spaniards ; shewing to Cortes, painted on a cloth, the cities which were arming against them by order of the king, and the routes which they were to take. While Cortes was preparing his troops for this expedition, messengers arrived at Tezcuco from Tuzapan, Mexicatztinco, and Nauhtlan, cities situated on the coast of the Mexican gulf beyond the colony of Vera Cruz, to offer obedience in the name of their chiefs to the king of Spain.

On the fifth of April Cortes set out from Tezcuco, with thirty horses, three hundred Spanish infantry, and twenty thousand allies, leaving the command of that place and the care of the brigantines to Sandoval. He went straight to Tlalmanalco, and from thence to Chimalhuacan (g), where he increased his army with other twenty thousand men, and who, to revenge themselves on the Mexicans, or from the hopes of spoil, or from both motives, came from different places to serve in that war. Directing his way according to the route marked in the Chalchese paintings, he travelled through the southern mountains towards Huaxtepec ; he saw near to the road a steep mountain, the top of which was occupied by a vast number of women and children, and the sides by innumerable warriors, who, trusting to the natural strength of that place, made game of the Spaniards with howling and whistling. Cortes, unable to endure this mockery, attacked the mountain on three sides ; but they were hardly begun to ascend with the greatest difficulty

(g) There were, and still are, two places of this name ; the one situated upon the border of the lake of Tezcuco, close to the peninsula of Iztapalapan, and called simply *Chimalhuacan* ; the other, which is in the mountains to the southward of the vale of Mexico, is called *Chimalhuacan Chalco* ; and it was to this last place that Cortes went.

culty through a shower of darts and stones, than he ordered a retreat ; for, besides that he perceived the attempt to be rash and more dangerous than fruitful, an army of the enemy came in sight, marching towards the same place, with an intent to attack the Spaniards behind, when they were most engaged in the assault. Cortes immediately made against them, with his troops well formed. The battle lasted a short time, for the enemy soon finding their inferiority of strength, quickly abandoned the field. The Spaniards pursued them upwards of an hour and a half, until they were entirely routed. The loss of the Spaniards on this occasion was almost nothing, but in the assault of the mountain eight were killed and many of them wounded.

The thirst which distressed the army, and the intimation which Cortes had of another mountain three miles off similarly occupied, forced him to march towards that part. He observed on one side of the mountain two lofty rocks, defended by many warriors ; but they, thinking that the Spaniards would attempt the assault on the side opposite, abandoned the rocks, and repaired where they apprehended most danger. Cortes, who knew well how to profit by all conjunctures which either fortune, or the imprudence of his enemies presented, ordered one of his captains to endeavour to occupy one of the rocks with a competent number of men, while he employed the besieged on the opposite quarter. He began then to ascend, though not without the utmost difficulty ; but when he had reached a post as high as that taken by the enemy, he saw the Spanish flag hoisted upon one of the rocks. The enemy finding themselves attacked on both sides, and having already begun to feel the loss which the fire-arms occasioned among them, surrendered. Cor-

tes treated them with the utmost humanity; but demanded from them, as a condition necessary to obtain his pardon, that they should induce those also who occupied the first mountain to surrender also, which they accordingly did.

Cortes, finding these obstacles removed, proceeded through Huaxtepec, Jauhtepec, and Xiuhtepec, to the large and pleasant city of Quauhnhuac (*b*), the capital of the nation of the Tlahuicas, upwards of thirty miles distant from Mexico, towards the south. This city was very strong from its natural situation; being on one side surrounded by steep mountains, and on the other by a hollow about seven perches deep, through which ran a little river. The cavalry could not enter there except by two ways, which were unknown to the Spaniards, or by the bridges which had been raised as soon as they had appeared. While they were seeking a convenient place to begin the assault, the Quauhnhuachese shot an incredible number of arrows, darts, and stones at them. But a courageous Tlascalan having observed, that two great trees, which grew on the opposite sides of the hollow inclining towards each other, had crossed and mutually interwoven their branches, he made a bridge of them to pass to the other side; and his example was quickly followed, though with great difficulty and with great danger, by six Spanish soldiers, and afterwards by many

(*b*) The name Quauhnhuac has been strangely altered by the Spaniards: Cortes calls this city *Coadnabased*, Bernal Diaz, *Coadalbac*, Solis, *Quatlabaca*, &c. That of *Cucinabaca* prevailed afterwards, by which it is known among the Spaniards at present; but the Indians still retain the old name Quauhnhuac. It is one of the thirty places which Charles V. gave to Cortes, and is at present part of the estates of the duke of Monteleon, as marquis of the valley of Oaxaca.

many Spaniards and Tlascalans (*i*). This act of intrepidity so intimidated those who defended the assault in that quarter, that they immediately retreated, and went to join the other citizens, who, at another part of the city, were opposing the troops led by Cortes ; but while most employed in the defence, they found themselves unexpectedly attacked by those troops, who, following that courageous Tlascalan, were now entered by the undefended part into the city. Terror made the citizens give up resistance, and put them to flight precipitately through the mountains ; while the allies, without any opposition, burned a great part of the city. The lord of it, who had fled with the rest, fearing to be overtaken in the mountains by the Spaniards, took occasion to surrender himself, declaring that he had not done it before because he waited till the rage of the Spaniards should be exhausted on the city, and by being satisfied with other hostilities, might abstain from treating his person cruelly.

After some repose the army left Quauhnahuac, loaded with spoils, directing their way towards the north, through a large wood of pines, where they endured a great thirst, and the day following found themselves near the city of Xochimilco. This beautiful city, the largest next to the three royal residences of all those in the Mexican vale, was founded upon the border of the lake of Chalco, a little more than twelve miles distant from the

(*i*) Solis, without making mention of that Tlascalan, attributes all the glory of that action to Bernal Diaz ; in which particular he contradicts Cortes, and other historians. Bernal Diaz himself, who, in the relation of this event, does himself all the honour he can, boasts of having been one of those who did not regard the risk of their lives, and passed the depth on the branches of the trees ; but by no means takes the honour to himself of having been the first who passed or suggested the attempt.

the capital : its inhabitants were numerous, its temples many, its buildings magnificent, and its gardens floating on the lake singularly beautiful, from whence it took its name of Xochimilco (*k*) : it had, like the capital, many canals or ditches, and for fear of the Spaniards, they had now several entrenchments. As soon as they saw the enemy approach, they raised the bridges of the canals, to make the entry more difficult. The Spaniards divided their army into three squadrons, to attack the city by as many places, but every where they met with a stout resistance, and could not take the first ditch until after a terrible engagement of more than half an hour, in which two Spaniards were killed and many wounded ; but having at last overcome those obstacles, they entered the city, pursuing the inhabitants, who persevered till night, fighting in the vessels in which they had made their retreat. They frequently heard voices among the combatants who demanded peace, but the Spaniards understanding that those cries were made with no other view than to gain time to place their families and goods in security, and to receive the succour which they expected from Mexico, pressed them still harder ; until, finding all resistance dropt, they retired to repose and cure the wounded : but they had hardly begun to draw their breath a little, when they saw themselves attacked by a great number of enemies, who came formed in order of battle by the same road by which the Spaniards had entered. They were now reduced to great difficulties, and Cortes himself was in imminent danger of becoming a prisoner of the enemy ; for his horse having fallen from fatigue, as he says, or being cut down by the blows

(*k*) *Xochimilco* means gardens and fields of flowers.

blows from the Xochimilcas, as some historians report, he continued fighting on foot with his lance ; but being overpowered by the enemy, he would not have been able to have saved himself from ruin, if a brave Tlascalan (1), and after him two of his own servants, had not seasonably come to his relief.

The Xochimilcas being at last defeated, the Spaniards had leisure to repose a little after the fatigues of the day, in which some of their soldiers had been killed, and almost all of them wounded, and the general himself and the principal officers Alvarado and Olid among the rest. Four Spaniards, made prisoners, were conducted to the capital, and sacrificed without delay, and their arms and legs sent to different places to encourage the subjects against the enemies of the state. It is beyond a doubt, that on this, as well as on other occasions, Cortes might easily have been put to death by the enemy, if they had not had so much anxiety to take him alive to sacrifice him to their gods.

The news of the taking of Xochimilco threw the court of Mexico into great consternation. King Quauhtemotzin assembled some military chiefs, and represented to them the loss and danger occasioned to Mexico by the capture of so considerable a place, the service they would render their gods and the nation in retaking it, and the courage and strength which was necessary to overcome those daring and destructive strangers. They immediately gave orders, therefore, to raise an army of twelve thousand men, to be sent by land, and another
to

(1) Herrera and Torquemada say, that the day after the great hazard Cortes had been in of being made prisoner, he sought for the Tlascalan who had rescued him, but could not find him either dead or alive ; on which account, from the devotion which the general paid to St. Peter, he became persuaded that that apostle had been the person who saved him.

to be sent by water ; which were so speedily executed, that the Spaniards had hardly reposed after the fatigues of the preceding day, when Cortes was advised by his centinels of the march of the Mexicans towards that city. This general divided his army into three divisions, and gave his captains the necessary orders ; he left some troops to garrison the quarters, and commanded that twenty horse with five hundred Tlascalans should pass across the enemy's front, to occupy a neighbouring little mountain, and wait there his final orders for the attack. The Mexican commanders advanced full of pride, making great ostentation of some European swords which had been taken from the Spaniards on the night of the first of July. The battle was begun without the city, and when it appeared proper time, Cortes ordered the troops posted on the little mountain to attack the rear of the Mexicans. They finding themselves attacked on every side, went into disorder and fled, leaving five hundred dead on the field. The Spaniards, on their return to their quarters, found that the body of men left there had been in great danger from the great number of Xochimilcas who had encountered them. Cortes, after having been for three days in Xochimilco in frequent skirmishes with the enemy, made the temples and houses be set on fire, and went to the market-place, which was without the city, to order his people for their march. The Xochimilcas being persuaded that his departure was the effect of fear, fell upon the rear-guard with great clamour ; but they were soon so severely repulsed by the Spaniards, that they never dared again to attack them.

Cortes advanced with his army as far as Cojohuacan, a large city situated upon the bank of the lake, six miles distant

distant from Mexico towards the south, with a view to observe all those posts, and make the fitter dispositions for the siege of the capital. He found the city evacuated, and the next day he set out from it, to examine the road which led from that city to the road of Iztapalapan. He found an entrenchment made there by the Mexicans, and ordered his infantry to attack it, who, in spite of the terrible resistance of the enemy who defended it, took it ; ten Spaniards being wounded, and some Mexicans killed. Cortes having mounted the trench, saw the road of Iztapalapan darkened with an innumerable enemy, and the lake covered with some thousands of boats, and after having observed every thing necessary to his purpose, he returned to the city, whose houses and temples he caused to be set on fire.

From Cojohuacan he marched the army to Tlacopan, though harassed on the way by some flying troops of the enemy, who attacked the baggage. In one of those scuffles, where Cortes was in great danger, they took two of his servants prisoners, who were conducted to Mexico and immediately sacrificed. Cortes arrived at Tlacopan in affliction at this misfortune, but his displeasure was greatly increased when he beheld from the upper area of the greater temple of that court, along with some other Spaniards, that fatal road wherein some months before he had lost so many of his friends and soldiers, and considered attentively the great difficulties which must be overcome before he could render himself master of the capital. Some of his officers suggested to him, to send his troops by that road to commit some hostilities on the Mexicans ; but he did not choose to expose them to so great risk ; and, without remaining longer in that city, he returned by Tenajoccan, Quauhtitlan, Citlaltepec,

Citlaltepec, and Acolman, to Tezcuco, having made a circuit in this expedition round all the lakes of the Mexican vale, and observed what efforts and exertions were necessary to execute the great enterprize in his mind with success.

In Tezcuco Cortes continued all the preparations for the siege. The brigantines were equipped, and a canal formed, a mile and a half long, sufficiently deep, and furnished on both sides with a fence, to receive the water of the lake into which the brigantines were to be launched, and a machine constructed to launch them. The troops which Cortes had under his command were almost without number, and likewise that of the Spaniards was considerably augmented by some who a few days before had arrived at the port of Vera Cruz, in a vessel from Spain loaded with horses, arms, and ammunition. Every thing appeared to promise a happy issue, at the moment the enterprize was in the greatest danger of being totally frustrated and ruined. Some Spanish soldiers, partisans of the governor of Cuba, incited either to hatred of Cortes, or envious of his glory, or, what seems still as probable, from fear of the dangers which threatened them in the siege of the capital, secretly agreed to take away his life, and those of his captains Alvarado, Sandoval, and Tapia, and all those who appeared to be most attached to the party of the general. The conspirators had not only determined the time and manner of securely executing the blow, but elected also those on whom the vacant posts of general, judge, and captains were to be conferred; when one of the accomplices, having repented of the deed, seasonably revealed the treason to Cortes. This general immediately made Antonio de Villafañã, the chief of the conspirators, be seized, committed

mitted his examination to a judge, and he having freely confessed the crime, was according to justice hanged from a window of the quarters. With respect to his accomplices, Cortes prudently dissembled, affecting not to believe them culpable, and ascribing the infamy imputed to them by the confession, to be the malice of Villafana ; but, in order that in future he might not be exposed to so much risk of his life, he formed a body-guard of several soldiers whose fidelity and courage he had tried, who attended him day and night, and watched continually over the safety of his person.

Having thus crushed, by the punishment of the ring-leader, that pernicious conspiracy, Cortes applied himself with the utmost activity to put the last hand to his great undertaking. On the twenty-eighth of April, after the celebration of the mass of the Holy Spirit, at which all the Spaniards communicated, and the brigantines were given benediction by a priest, they were launched into the water, immediately displayed their sails, and began to plough the lake under a discharge of the artillery and small arms, which was followed by the singing of *Te Deum* to the music of military instruments. All those demonstrations of satisfaction were in consequence of the great confidence Cortes had in the brigantines for the success of his enterprise, without which perhaps, he would never have been able to have conducted it to a happy end. He afterwards made a review of his army, and found it to consist of eighty-six horses, and more than eight hundred infantry, three large iron cannon, fifteen smaller of copper, a thousand Castilian pounds of gun-powder, and a large quantity of balls and arrows, the number and strength of his little army having been doubled by the supplies of that year from Spain and the

Antilles. In order to encourage them, he made them an harangue fimilar to that which he had delivered to them when he left Tlafcala. He fent meffengers to this republic, to Cholula, Huexotzinco, and other cities, to let them know that the brigantines were now completed, and requefting them to fend within ten days as many chofen troops as they could mufter, for that now the time was come for giving fiege to that proud city, which had for fo many years oppreffed their liberty. Five days before the feaft of Pentecoft, the army of Tlafcala arrived at Tezcuco, confifting, according to what Cortes affirms, of more than fifty thoufand men, under the command of feveral famous chiefs, among which came the young Xicotencatl and the brave Chichimecatl; who were met by Cortes and his people. The troops of Huexotzinco and Cholula paffed thither through the mountains of Chalco, agreeably to the orders given them. In the two following days came other troops from Tlafcala and other neighbouring places, which, together with thofe abovementioned, made more than two hundred thoufand men, as is attested by their leader and conductor Alfonfo d'Ojeda.

On the Monday of Pentecoft, twentieth of May, Cortes muftered his people in the greater market-place of Tezcuco, to make a divifion of his army, to appoint the commanders, to affign to each the ftation where they were to form their camp, and the troops which were to be immediately under them, and to publifh afrefh the military proclamation formerly publifhed in Tlafcala. He ordered Pedro de Alvarado to remain in camp in the city of Tlacopan, to prevent any affiftance coming through that quarter to the Mexicans, and affigned him thirty horfes and one hundred and fixty-eight foot foldiers,

diers, distributed into three companies under as many captains with twenty thousand Tlascalans and two pieces of artillery. Christopher Olid was created camp-master, and chief of the division destined for the city of Cojohuacan, and assigned thirty-three horses, one hundred and sixty-eight foot soldiers, under three other captains, with two pieces of artillery, and more than twenty-five thousand allies. To Gonzales de Sandoval he gave twenty-four horses, one hundred and sixty-three Spanish infantry, under two captains with two cannons, and the allies of Chalco, Huexotzinco, and Cholula, who were more than thirty thousand in number, and ordered him first to go and destroy the city of Iztapalapan, and then to encamp himself wherever he thought he could most effectually hem in the Mexicans. Cortes in spite of the remonstrances made him by his captains and soldiers, took the command of the brigantines, where he thought his assistance would be most necessary. He distributed among the thirteen brigantines three hundred and twenty-five Spaniards and thirteen falconets, assigning to each brigantine a captain, twelve soldiers, and as many rowers; so that the whole army destined to begin the siege of the capital, consisted of nine hundred and seventeen Spaniards, and more than seventy-five thousand auxiliary troops (*m*); which number was soon after increased, as we shall find, to two hundred thousand and more. All the other troops which had repaired to Tezucuo, either remained there to be employed when it was necessary, or returned to their own places of abode, as they

(*m*) Solis says, that Bernal Diaz complains often that the allies gave them more hindrance than assistance; but this is totally false, for Bernal Diaz on the contrary, frequently says, that the allies were of great assistance, and fought courageously against the Mexicans. "The Tlascalans our friends," he says, in chap. 151. "assisted us greatly during the whole war, like brave people."

they were not too distant from the capital to be speedily summoned whenever it was requisite.

Olid and Alvarado departed together with their troops from Tezcuco, to go to their respective posts assigned them by the general. Among the higher ranks of Tlascalans who accompanied Alvarado, were the young Xicotencatl, and his cousin Pilteuētlī. In a quarrel which happened, the latter was wounded by a Spaniard, who, regardless of the orders published by the general, or the respect due to that person, was near occasioning the desertion of the Tlascalans. This outrage disgusted them extremely, and made them express their dissatisfaction in an open manner. Ojeda, their leader, endeavoured to pacify them, and gave permission to Pilteuētlī to return to be cured in his native country. Xicotencatl, who, on account of his rank as well as his relation to Pilteuētlī, was most sensible of the insult, finding no other way to be revenged, secretly abandoned the army, and, with some other Tlascalans, took the road to Tlascala. Alvarado gave immediate advice of this to Cortes, who ordered Ojeda to overtake and seize him; and after being taken made him be publicly hanged in the city of Tezcuco (*n*), as Herrera and Torquemada say, or in a place near to it as Bernal Diaz affirms; it having been first published by a herald, that the cause of his condemnation was his having deserted, and excited the
Tlascalans

(*n*) Cortes does not make mention of this event: it is probable he had particular motives for concealing it. Solis thinks it impossible that Xicotencatl was punished in Tezcuco; "Because Cortes would have risked too much by the execution of so violent a sentence under the eyes of so many Tlascalans, who would naturally have been shocked and disgusted at so ignominious a punishment being inflicted on one of the first men of their nation." But Cortes risked a great deal more, when he imprisoned Montezuma in his own court, and under the eyes of a much superior number of Mexicans, who must have been equally sensible of the outrage done to the first man of their nation.

Tlascalans against the Spaniards. It is probable that Cortes would not have risked the execution of such a sentence, if he had not first obtained, as Herrera expressly affirms, the consent of the senate of Tlascalala; which was not difficult, considering their severity in punishing crimes even when committed by the most eminent persons, and the particular hatred also which they bore to that prince, whose pride and arrogance of character they could not endure. So alarming a punishment, which ought naturally to have inflamed the minds of the Tlascalans against the Spaniards, intimidated them to such a degree, as well as the other allies, that from that time forward they observed more punctually the articles of war, and kept under more subordination to those strangers who were their leaders; the Spaniards profiting even from their faults and misconduct; but the Tlascalans were not afraid to make many demonstrations of their esteem and veneration for that prince, bewailing his death and distributing his clothes as precious relics among themselves, and celebrating, as is probable, his funeral with usual honours. The family and property of Xicotencatl were adjudged to the king of Spain, and brought to Tezcuco. In his family were thirty wives, and amongst his property a large quantity of gold.

Alvarado and Olid continued their march towards Tlacopan, where their object was to break the aqueduct of Chapoltepec, to cut off the water from the Mexicans; but they were unable to execute this measure without surmounting a powerful resistance from the enemy, who, having foreseen the blow, had made preparations both by land and water for their defence. They were soon defeated, and the Tlascalans in pursuing them killed twenty, and made seven or eight prisoners. Having
fo

so successfully accomplished this step, those two commanders resolved to go by the way of Tlacopan, to take some ditch by assault; but so great was the multitude of Mexicans who came against them, and so thick the shower of arrows, darts, and stones, which were shot at them, that eight Spaniards were killed and more than fifty wounded, and they with difficulty were able to retreat in shame to Tlacopan, where Alvarado encamped, according to the order of the general, and Olid marched to Cojohuacan on the thirtieth day of May, consecrated that year to the solemnity of Corpus Domini, on which day began, according to the computation made by Cortes, the siege of Mexico.

While Alvarado and Olid were employed in filling up some ditches which were made upon the border of the lake, and were repairing some passages for the convenience of the cavalry, the commander Sandoval, with the number of Spaniards above mentioned, and with more than thirty-five thousand allies, marched from Tezcucó on the thirty-first of May with an intent to take the city of Iztapalapan by assault, against which Cortes was particularly bent. Sandoval made his entry there, committing terrible devastation and havoc by fire upon the houses and by his arms upon the inhabitants, who in terror attempted to save their lives by water. Cortes, in order to attack at the same time that part of the city which was contiguous to the water, after having made the whole lake be founded, embarked with his people in his brigantines, and proceeded by means of sails and oars towards Iztapalapan. He struck ground near to an insulated little mountain, at a small distance from that city, the top of which was occupied by a numerous enemy, resolved to defend themselves and annoy the Spaniards

as much as possible. Cortes disembarked there, and, with one hundred and fifty men, surmounting the steepness and difficulty of the ascent and the resistance of the enemy, took the mount and killed all the Mexicans who defended it. But they had hardly taken possession of it, when they perceived a fleet of boats coming against them, which had been summoned there by a signal of smoke, that on the first appearance of the brigantines, was made from that little mountain and from some temples in that neighbourhood. The Spaniards immediately re-embarked and stood without moving upon their defence, until at length being favoured with a fresh breeze which sprung up suddenly, and increasing the velocity of the brigantines, with the impulse of the oars, they rushed violently upon the boats, breaking some of them to pieces and oversetting others. Some of the enemy were killed by balls, and many were drowned; all the others fled, and were pursued for eight miles by the brigantines, as far as the capital.

The commander Olid, as soon as he discovered from a temple of Cojohuacan the engagement of the brigantines, marched with his troops in order of battle along the road which led to Mexico, took some ditches and trenches, and killed a number of the enemy. Cortes, on his part, collected that night all his brigantines, and went with them to attack the bastion, which, as we have already mentioned, was erected in that angle which was formed by the junction of the road of Cojohuacan with the road of Iztapalapan. He made the attack by land as well as water, and in spite of the bravery with which it was defended by the Mexican garrison posted there, he took it; and made a horrid slaughter, with two large pieces of cannon, of the multitude which covered the lake

lake as well as the road. That place, called by the Mexicans *Xoloc*, appeared extremely advantageous to Cortes for the establishment of his camp, and it certainly would not have been easy to have found another more suitable to his designs; for, by means of it he became master of the principal road and that part of the lake where the greatest succours could enter to the city, and besides that of the road of Cojohuacan which formed a communication with the camp of Olid. The small distance of that place from the camps of Cojohuacan and Tlacopan was of great importance to Cortes, in giving his orders with expedition, and to render assistance when it proved necessary. In short, its vicinity to Mexico contributed to make every attack more easy.

There he assembled his brigantines, and abandoning the expedition against Iztapalapan, formed a resolution to give very soon a commencement to his operations. He ordered to his camp one half of the troops of Cojohuacan, and fifty chosen soldiers from the troops under Sandoval. That night he heard a great body of enemies coming towards his camp. The Spaniards, knowing that the Mexicans were not used to combat by night unless when they were secure of victory, were at first apprehensive; but, although they received some hurt from the enemy, they obliged them by the fire of their artillery and muskets to retire to the city. The next day they found themselves attacked by a prodigious multitude of warriors, who enlarged their number in the imagination of the Spaniards with dreadful howls. The supply expected from Cojohuacan being arrived, Cortes made a rally with his people in order of battle. They fought with great courage and obstinacy on both sides, but the Spaniards and their allies took one ditch and an intrenchment,

ment, and did so much damage to the Mexicans with their artillery and horses, that they were compelled to retreat to their city; and because, by that part of the lake which was to the west of the road, they were much annoyed by the vessels of the Mexicans, Cortes made one of the ditches be enlarged, that the brigantines might pass there, which immediately charged impetuously upon them, pursued them as far as the capital, and set fire to some houses of the suburbs.

In the meanwhile, Sandoval having successfully terminated, though not without infinite peril, the expedition of Iztapalapan, marched with his troops towards Cojohuacan. On his way thither, he was attacked by the troops of Mexicaltzinco, but he defeated them, and set fire to the city. Cortes, apprised of his march, and also of a great ditch which had been recently made in that road, sent two brigantines to facilitate the passage to the army. It marched towards Cojohuacan, and Sandoval came with ten cavalry to the camp of Cortes. When he arrived there he found the Spaniards in combat with the Mexicans: the fatigue of the journey and the battle of Mexicaltzinco was not sufficient to restrain him from engaging: he joined battle with his usual courage, but while fighting he was pierced in the leg by a dart, and many other Spaniards were wounded with him. Those advantages, if we may call them so, are little in comparison with the loss which the Mexicans sustained that day, or the dread which the fire of the artillery excited in them; which was so great, that for some days they durst not come near the Spanish camp. The Spaniards continued for six days in continual skirmishes; the brigantines sailing round the capital, set fire to many houses of the suburbs, and in their expeditions discovered a

large and deep canal, by which they could easily enter the city. This was in future a circumstance of great advantage to the Spaniards.

Alvarado, on his part, hemmed in the Mexicans as much as possible, by taking at different encounters some ditches and intrenchments on the road of Tlacopan ; but some of his men were killed, and many wounded. He observed, that by the road of Tepejacac, situated towards the north, provisions were continually introduced to the city, and perceived also, that by that road the besieged could easily escape, when they found they could no longer resist the besiegers. He communicated this observation to Cortes, who commanded Sandoval to go with one hundred and eighteen Spaniards and a very strong army of allies to occupy that place, and intercept the supplies which should come that way to the enemy. Sandoval obeyed, though still unrecovered of the wound in his leg, and took possession without opposition of that station, by which means every communication of the Mexicans with other cities by land was cut off (o).

This being done, Cortes determined to make an entry the next day into the city, with more than five hundred Spaniards and more than eighty thousand allies from Tezcucó, Tlascala, Chalco, and Huexotzinco, leaving some cavalry with ten thousand allies to guard the camp; ordering Sandoval and Alvarado to enter there at the same

(o) Doctor Robertson says, that Cortes designed to attack the city at three different places; from Tezcucó, on the east side of the lake; from Tacuba, on the west; and from Cuzocan (that is, Cojohuacan), in the south; those cities, he adds, commanded the principal causeways which led to the capital, and were built for its defence: but this is an error; because to the eastward there was not, nor could be, any road which led to the capital, on account of the depth of the lake. Sandoval did not encamp in Tezcucó, from whence it was impossible to attack Mexico, but in Tepejacac, towards the north.

same time, each by his different road, with their troops, which were not less than eighty thousand in number. Cortes marched along his road, with his numerous army well marshalled and flanked by the brigantines; but had advanced only a short way when they met with a broad deep ditch and intrenchment more than ten feet high. The Mexicans courageously opposed their passage, but being beat back by the artillery from the brigantines, the Spaniards passed, pursuing the enemy as far as the city, where they found another great ditch and a strong and high intrenchment. The force of the water in this ditch, the monstrous swarms of the enemy who assembled to defend it, their dreadful and menacing airs and the unceasing shower of arrows, darts, and stones, which they discharged, staggered for some time the resolution of the Spaniards; but having at length, with the fire of all the artillery and other arms, driven those from the intrenchments who defended them, the army passed and advanced, taking other ditches and intrenchments, unto the principal square of the city, which was full of people. In spite of the havoc they saw made on the multitude by a large cannon planted in the entrance of the square, the Spaniards dared not to enter there, until the general himself, reproaching them for their ignominious fear and charging intrepidly upon the enemy, infused new courage into his soldiers. The Mexicans, intimidated by such great intrepidity, fled for shelter within the inclosure of the greater temple, and finding themselves attacked there also, they took refuge in the upper area of the temple, whither they were still pursued; but all on a sudden the Spaniards found themselves attacked behind by other Mexican troops, and reduced to such difficulty, that not being able to withstand the fury of the enemy
neither

neither within the inclosure nor without in the square, they were obliged to retire to the road by which they had entered the city, leaving the piece of artillery in possession of the enemy. A little time after, three or four horses came seasonably into the square, and the enemy being persuaded that the whole cavalry was coming against them, went into confusion from the fear they had of those large and fiery animals, and ignominiously abandoned the temple and the square, which were immediately occupied by the Spaniards. Ten or twelve Mexican nobles were fortified in the upper area of the great temple; but, in spite of their obstinate resistance, they were vanquished and killed by those who attacked them. The Spanish army in its retreat set fire to the largest and most beautiful houses on the road of Iztapalapan, though not without the utmost danger, on account of the impetuosity with which the Mexicans attacked the rear, and the annoyance they suffered from the terraces. Alvarado and Sandoval made great havoc of the Mexicans with their troops, and the allies received on this day great encomiums from the Spanish general.

The forces of the Spaniards were daily so much increased with fresh supplies, and with the alliance of new cities and whole provinces, that although there were not in their three camps at first more than ninety thousand men, in the space of a few days they amounted to two hundred and forty thousand. The new king of Tezcucó, in order to manifest his gratitude to Cortes, endeavoured to gain the whole nobility of his kingdom to his party, and equipped an army of fifty thousand men, which he sent to the assistance of the Spaniards, under the command of a prince, his brother, a youth, of whose bravery all ancient historians give testimony, and,

and, amongst others, Cortes himself, who boasts of the seasonableness and importance of his aid. That prince remained with thirty thousand men in the camp of Cortes, and the other twenty thousand were distributed in the camps of Sandoval and Alvarado. This supply of the king of Tezcuco was quickly followed by the confederacy of the Xochimilcas and the Otomies, the mountaineers, with the Spaniards, which new troops added twenty thousand men to the army of Cortes.

There was nothing wanting to this general for the completion of the siege, but the prevention of the supplies which were introduced by water into the city. Retaining seven of the brigantines, he therefore sent the other six towards that part of the lake which was between Tlacopan and Tepejacac, that there they might be ready to assist the camps of Sandoval and Alvarado, when those commanders should require it; but while not employed by them, they were to cruise two by two, and endeavour to intercept all the vessels which were transporting either men or provisions to the city.

Cortes, finding he had now a sufficient number of allied troops, determined, in the course of three days, to make an entry into the city. He gave the necessary orders for this purpose, and on the day appointed he marched with the greater part of his cavalry, with three hundred infantry, seven brigantines, and innumerable multitudes of allies. They found the ditches open, the intrenchments thrown up, and the enemy well prepared to resist them; but notwithstanding this, they took all the ditches and entrenchments, which were formed between them and the principal square of Tenochtitlan. Here the army made a halt, Cortes not permitting them to proceed forward, without leaving all the difficult passes
which

which they had taken levelled ; but while ten thousand of the allies were busied in filling up the ditches, others set fire to and demolished some of the temples, houses, and palaces, and, amongst others, that of king Axajacatl, where the Spaniards were formerly quartered, and the celebrated palace of birds of Montezuma. After having committed those hostilities with great difficulty and danger, on account of the efforts which the Mexicans made to hinder them, Cortes founded a retreat, which was happily effected, although the rear-guard was incessantly harassed by the troops of the enemy. The same thing was performed by Sandoval and Alvarado in their quarter. This was indeed a day of great fatigue to the Spaniards and their allies, but likewise of unspeakable affliction to the Mexicans, as much on account of so many beautiful edifices which were destroyed, as the scorn and mockery they suffered from their own vassals who were leagued with the Spaniards, and from their mortal enemies the Tlascalans, who, while they combated, shewed the arms and legs of the Mexicans whom they had slain, and threatened to eat them that night to their supper, as in fact they did.

The next day, in order to give no time to the Mexicans to dig the ditches which had been filled up, or repair the intrenchments which had been beat down, Cortes set out early from his camp, in the same manner as the preceding day ; but, in spite of his diligence, the Mexicans had already renewed the greater part of the fortifications, and defended them so obstinately, that the army of the besiegers could not take them till after a most furious engagement of five hours. The army pushed forward, and took two ditches on the road of Tlacopan ; but the day being now near finished, they retired

to

to their camp, fighting all the way with the troops of the enemy, who fell upon the rear-guard. The armies of Sandoval and Alvarado had similar contests, the besieged being obliged to oppose, at the same time, three most numerous armies, superior to them in arms, in horses, in the brigantines, and in military discipline. Alvarado, on his side, had now demolished all the houses, from one end to the other, on both sides of the road of Tlacopan (*e*), for the habitations of the capital were continued on that road unto the continent or main land, according to the accounts both of Cortes and Bernal Diaz.

Cortes would willingly have saved his troops the trouble and fatigue of daily repeating their engagements to take the same ditches and intrenchments, but he could not leave a garrison to preserve those acquisitions, without sacrificing it to the fury of the enemy, nor was he willing to encamp within the city, as some of his captains advised him; for, besides the incessant assault which they must have endured from the enemy, they could not from thence so easily as from the post of Xoloc prevent supplies from coming into the city.

While succours were daily diminishing to the besieged, those of the besiegers were gradually increasing; and at this very juncture they received one which was as advantageous for them as it was hurtful to the enemy. The inhabitants of the cities situate upon the border and little islands of the lake of Chalco, had been hitherto the enemies of the Spaniards, and could have done much

(*e*) These houses were not built on the road itself, but upon little islands near to it, on both sides. We do not find that there was any other building upon the road but a temple, situated on that part where the road broadened out, and formed a little square. This temple was taken by Alvarado, who kept a garrison there almost the whole time of the siege.

much damage to the camp of Cortes, if their troops had attacked it from one part of the road, while at the same time the Mexicans had attacked it from another; but they had not attempted any hostilities against the Spaniards, perhaps because they reserved themselves for some very favouring occasion. The Chalchese, and other allies, who did not like the neighbourhood of so many enemies, endeavoured to draw them over to their party, sometimes by promises, sometimes by threats and vexations; and their importunity, and perhaps also the fear of revenge from the Spaniards, had so much influence, that the nobles of Iztapalan, Mexicaltzinco, Colhuacan, Huitzilopochco, Mizquiz, and Cuitlahuac, which cities formed a considerable part of the Mexican vale, came to the camp to make a confederacy with the Spaniards. Cortes was extremely glad of their alliance, and requested of them that they would not only assist him with their troops and vessels, but likewise transport materials for the erection of huts along that road; for it being now the season of rain, his people suffered much from the want of habitations.

His demand was so readily complied with, that they sent immediately a large body of troops, the number of which is not known, to be under the command of Cortes, and three thousand vessels to assist the brigantines in their operations. In these they transported the materials, with which they built such a number of barracks, that all the Spaniards, and two thousand Indians employed in their service, were conveniently accommodated; for the majority of the allied troops were encamped in Cojohuacan, four miles distant from Xoloc; and, not content with giving this assistance, they brought ma-

ny provisions to the camp, particularly fish and cherries in great quantities.

Cortes, finding himself so well reinforced with troops, entered two or three days successively into the city, making dreadful slaughter of the citizens. He was inclined to imagine that the besieged would necessarily surrender, seeing such an excessive number of troops armed against them, and having experienced the ruinous effects of their obstinacy: but in this he was mistaken, for the Mexicans were determined to lose their lives sooner than their liberty. He resolved therefore to make continued entries into the city, in order to compel them by hostilities to ask for that peace which they had refused. He formed two armaments of his vessels, each consisting of three brigantines and fifteen hundred small boats, ordering them to proceed towards the city, to set fire to its houses, and do the Mexicans all the mischief in their power. He gave orders to Sandoval and Alvarado to do the same on their side, while he with all his Spaniards, and eighty thousand allies, by what appears, marched as usual by the road of Iztapalapan towards the city, but without being able to gain, either in this or other entries which he made in those particular days, any other advantage than that of gradually reducing the number of the enemy, demolishing some of their buildings, and advancing daily some little way farther for the purpose of opening a communication with the camp of Alvarado, although then it was not in his power to effect it.

Alvarado and all his troops, seconded by the brigantines, had already taken possession of a temple, which stood in a little square in the road of Tlacopan, in which he maintained from that time a garrison, in spite of the violent assaults of the Mexicans. He had also taken

some ditches and intrenchments, and knowing that the greatest force of the enemy was in Tlatelolco, where the king Quauhtemotzin resided, and numbers of the inhabitants of Tenochtitlan had resorted, he directed his operations towards that quarter; but although he fought frequently with all his force both by land and water, he could not advance where he wished, from the gallant opposition of the besieged. In those engagements many perished on both sides. In one of the first contests a strong and courageous warrior of Tlatelolco, disguised like one of the Otomies, with an *Ichcabupilli*, or breast-plate of cotton, and with no other arms than a shield and three stones, made his appearance, and running most swiftly towards the besiegers, he threw his three stones successively with such dexterity and with such force, that with each he knocked down a Spaniard, exciting no less indignation among them than fear and wonder in the allies. They endeavoured, by every means, to get him into their hands, but could never take him, for in every engagement he appeared differently dressed, and in each occasioned much loss to the besiegers, having as much swiftness in his feet to make his escape as force in his arms to strike his blows. The name of this celebrated hero of Tlatelolco was *Tzilacatzin*.

Alvarado, elated with some advantages obtained over the Mexicans, strove one day to push forward as far as the market-place: he had already taken several ditches and intrenchments, and among others, one which was fifty feet broad, and more than seven feet deep; but forgetting, through his success, to make it be filled up, as his general had enjoined, he advanced with forty or fifty Spaniards, and some allies. The Mexicans having observed this neglect, soon poured in numbers upon them,

them, and defeated and put them to flight, and in re-passing the ditch, killed some of the allies and made four Spaniards prisoners, who were instantly sacrificed in sight of Alvarado and his people, in the greater temple of Tlatelolco. Cortes was extremely troubled at this disaster, as it must have increased the courage and pride of the enemy, and went immediately to Tlacopan, to give a severe reprimand to Alvarado for his disobedience and rashness; but when he was informed how courageously he had conducted himself that day, and taken possession of the most difficult posts, he gave him only a kind admonition, and inculcated his former orders respecting the manner of making his entry.

The troops of Xochimilco, Cuitlahuac, and other cities on the lake, which were in the camp of Cortes, willing to profit by the opportunity which presented itself in the entries which the Spaniards made, to plunder the houses of the capital, availed themselves of a most abominable piece of treachery. They sent a secret embassy to king Quauhtemotzin, declaring their inviolable fidelity to the crown, and complaining of the Spaniards, because they had forced them to take arms against their natural lord; and adding, that they designed on their next entry to unite with the Mexicans against those enemies of their country, to kill them all, and thus put an end to his calamities. The king praised their resolution, appointed them the posts which they were to occupy, and also returned them gifts in reward of their pretended fidelity. Those traitors entered the city as usual, and feigning at first to turn their arms against the Spaniards, began afterwards to plunder the houses of the Mexicans, killing those who opposed them, and imprisoning the women and children: but the Mexicans soon detecting their perfidy,

fidy, fell upon them with such merciless fury, that almost every one of them atoned for his treachery with his life. A great many of them were killed in the contest, and the others, who were made prisoners, were immediately sacrificed by order of the king. This treason appears to have been both designed and executed by the very lowest of the populace of those cities, who are always guilty of such meaneesses.

Twenty days were now past in which the Spaniards had made continual entries into the city. Some captains and soldiers weary of so many repeated engagements, the fruits of which appeared still very distant to them, complained to the general, and earnestly conjured him, to exert all the forces he had in one decisive blow, which would end all his dangers and fatigues. The design formed by them was to advance as far as the centre of Tlatelolco, where the Mexicans had assembled all their forces, and attempt to ruin them in one night, or at least bring them to a surrender. Cortes, who well knew the imminent danger of this enterprise, strove to divert them from it with all his arguments; but those being of no avail, nor being able to reject a measure which had been almost generally adopted, yielded at last to their importunities. He ordered Sandoval to join Alvarado with one hundred and fifteen Spaniards and ten horses, to put the cavalry in ambuscade, and carry off the baggage under pretence of making a departure, and abandoning the siege of the city, in order that the Mexicans, by being induced to pursue them, might be attacked by the cavalry in their rear; to aim at gaining possession, by the assistance of six brigantines, of that great ditch where Alvarado was defeated, making it be filled up and levelled; to advance not a step without leaving the road well

well accommodated for a retreat, and then to enter in a body into the square of the market.

On the day fixed for the general assault, Cortes marched with twenty-five horses, with all his infantry, and more than an hundred thousand allies. His brigantines, with more than three thousand canoes, formed the two wings of his army on both sides of the road. He entered the city without opposition, and quickly divided his army into three parts, that they might each, by three different roads, arrive at the same time in the square of the market. The command of the first division was given to Julian Alderete, treasurer to the king, who was the person that had most earnestly pressed Cortes to undertake this expedition; and he was ordered to proceed through the principal and largest road with seventy Spaniards, seven horses, and twenty thousand allies. Of the other two roads, which led from the great road of Tlacopan to the square of the market, the least confined was assigned to the captains Andrea de Tapia, and George Alvarado, brother of P. de Alvarado, with eighty Spaniards, and upwards of ten thousand allies; and the narrowest and most difficult, the general charged himself with, having one hundred soldiers, and the body of the auxiliary troops, leaving the cavalry and artillery in the entry to each road. The parties entered all at one time, and engaged courageously. In the beginning the Mexicans made some resistance, but afterwards feigning cowardice, they retreated, abandoning the ditches to the Spaniards, in order that, allured by the hopes of victory, they might run themselves into greater dangers. Some Spaniards pushed forward to the streets near to the square of the market, unwarily leaving behind them a broad ditch badly filled up, and when they were most ardently advancing,

vancing, and striving who should first enter into that square, they heard the formidable sound of the horn of the god Painalton, which was blown by the priests in cases of public and pressing necessity, to excite the people to arms. Immediately such a multitude of Mexicans assembled, and poured with such fury upon the Spaniards and allies, that they threw them into confusion, and compelled them to return precipitately back towards the ditch, which was apparently filled up with faggots, and other light materials; but when they attempted to pass, it sunk with the weight and violence of the multitude. Here the sharpest conflict and greatest peril of the fugitives happened; for being unable at the same time to defend themselves and pass by swimming, they were wounded and taken by the Mexicans. Cortes, who with the usual diligence of a good general, had advanced to the ditch when his defeated troops arrived there, endeavoured to stop their flight by his cries, that their disorder and confusion might not increase the slaughter made of them by the enemy; but words are not capable of restraining the flight of a disordered multitude to whom fear adds wings. Pierced with vexation at the disasters of his people, and regardless of his own personal danger, he approached to the ditch to save all those he could. Some were got out disarmed, some wounded, and some almost drowned. He at last put them into some order to proceed towards the camp, he himself remaining behind with from twelve to twenty men to guard their rear; but they had hardly begun to march, when he found himself in a narrow pass surrounded by the enemy. That day would certainly have been his last, in spite of the extraordinary bravery with which he defended himself, and with his life all hopes would have fled of the conquest

conquest of Mexico, if the Mexicans, instead of wishing to kill him, which was frequently in their power, had not eagerly strove to take him alive, to honour their gods with the sacrifice of so illustrious a victim. They had already seized him, and were leading him off for this purpose, when his people, apprised of his being a prisoner, came speedily to relieve him. Cortes owed his life and his liberty to a soldier of his guard, called Christoval de Olea, a man of infinite courage and great dexterity in arms; who, upon another occasion, had rescued him from similar danger, and upon this saved him at the risk of his own life, by cutting off with one stroke of his sword, the arm of that Mexican who had taken him. Cortes was indebted in like manner for his liberty to the Prince D. C. Ixtlilxochitl, and to a brave Tlascalan, named Temacatzin.

The Spaniards at last, though not without the greatest difficulty, and a number of wounds, got upon the great road of Tlacopan, when Cortes was able to rally them, and took himself the rear-guard with the cavalry; but the boldness and fury with which the Mexicans pursued them were such, that it appeared impossible for them to escape with their lives. The divisions which had entered by the other two roads, had also had terrible encounters; but, because they had been more careful in filling up the ditches, their retreat was less difficult when Cortes ordered them to march to the greater square of Tenochtitlan, where they all collected. From thence they discovered, with the utmost mortification, the smoke of copal arising from the stoves of the greater Temple, which the Mexicans were burning as a thanksgiving for the victory they had obtained; but the vexation was still stronger when they saw the heads of some Spaniards
thrown

thrown towards them by the Mexicans, to dispirit them, and when they heard a report that the commanders Alvarado and Sandoval were slain. From the square they proceeded by the road of Iztapalapan, to their camp, still pursued by a multitude of the enemy.

Alvarado and Sandoval had made an effort to enter into the square of the market by a road, which led from that of Tlacopan to Tlatelolco, and had advanced their operations so far as to a post at a little distance from that square, but upon seeing the sacrifices of the Spaniards, and having heard the Mexicans say, that Cortes and his captains were killed, they retired, though with the greatest difficulty; for the enemy, with whom they had been engaged, were joined by those who had defeated the troops of Cortes.

The loss sustained by the besiegers on that day was seven horses, a number of arms and boats, and a piece of artillery, upwards of one thousand allies, and more than sixty Spaniards, part killed in battle, part made prisoners, and immediately sacrificed in the greater Temple of Tlatelolco, in sight of the troops of Alvarado. Cortes received a wound in his leg, and hardly one of the besiegers came off without being either wounded or otherwise discomfited.

The Mexicans celebrated the victory for eight successive days with illuminations and music in their temples; they spread the fame of it through all the kingdom, and sent the heads of the Spaniards through all the provinces of the empire who had rebelled against the crown, to recall them to obedience, to which many were induced. They dug the ditches again, repaired the intrenchments, and put the city, excepting the temples and houses ruined by the

the enemy, into the state it was in before the siege commenced.

In the mean while the Spaniards kept themselves upon the defence in their camps, curing their wounded, and recruiting themselves for future combats; but in order also that the Mexicans might not avail themselves of their idleness, Cortes ordered the brigantines to go two by two to cruize upon the lake. The Mexicans, sensible of the superiority of the Spanish vessels and arms, and though not able to equal the last, they endeavoured in some measure to match the brigantines. They had for this purpose constructed thirty large vessels, called by the Spaniards *periaguas*, well finished, and covered with thick planks, to enable them to combat in them without so much danger of being damaged. They determined to lay an ambuscade for the brigantines in one of the small woods, or thickets of reeds, formed by the floating fields of the lake, and fixed in several places large stakes under water that the brigantines might strike upon them and founder, or at least be made less capable of defence. Having prepared their ambuscade, they sent out two or three little ordinary vessels from among the reedy places of the lake, that they might, by attracting the notice of the brigantines, lead them in their flight towards the place of the ambuscade. The Spaniards, as soon as they saw them, gave them chase, but while they were in the heat of the pursuit, the brigantines struck upon the stakes, and at the same time, the thirty large vessels came out, and attacked them on every quarter. The Spaniards were in great danger of losing not only their vessels, but their lives; but while the small guns kept the enemy in play, some expert swimmers had time to clear the stakes, upon which being freed from this hindrance,

they were able to make use of their artillery to drive off the enemy. The brigantines were a good deal damaged, the Spaniards wounded, and of the two captains who commanded them, one was killed in the fight, and the other died in three days of his wounds. The Mexicans refitted their vessels to repeat the stratagem, but Cortes being secretly informed of the place where they lay, disposed himself a counter-ambuscade of six brigantines, and profiting by the example of the enemy, he ordered one brigantine to cruise near the place where the Mexican vessels were in ambush. Every thing succeeded as he had planned, for the Mexicans, upon seeing the brigantine, pushed out immediately from their ambuscade, and when they imagined themselves most certain of their prey, the other five brigantines came out impetuously against them, and began to play off their artillery, with the first fire of which they overset some of the enemy's vessels and routed the rest. The greater part of the Mexicans perished in the attack, some were made prisoners, and among them some nobles, whom Cortes thought immediately of employing to solicit some accommodation with the court of Mexico.

Those noble prisoners were accordingly sent to tell king Quauhtemotzin that he should reflect how much the forces of Mexico were daily diminishing, while, at the same time, those of the Spaniards were augmenting: that at the last they would be obliged to yield to superior strength; that although the Spaniards did not enter the capital to commit hostilities, in order to reduce them, it would be sufficient alone to hinder them from receiving any supplies; that they might still shun the disasters which awaited them; that if they would accede to propositions of peace, he would immediately cease all hostilities;

lities ; the king should remain in quiet possession of his crown, with all his grandeur, power, and authority, which he had hitherto enjoyed ; that his subjects should remain free, and masters of all their property, without any thing being demanded from his majesty or his subjects, but the homage due to the king of Spain, as the supreme lord of all that empire, whose right had been already acknowledged by the Mexicans themselves, as founded on the ancient tradition of their ancestors ; that if on the contrary he persisted in war, he would be deprived of his crown, the greater part of his vassals would lose their lives, and their large and beautiful city totally destroyed. The king consulted with his counsellors, with the generals of the army, and the heads of their religion ; he explained to them the subject of the embassy, the state of the capital, the scarcity of provisions, the afflictions of his people, and the still greater evils which threatened them, and commanded them to speak their opinions freely. Some of them foreseeing the issue of the war, were inclined to peace ; others, instigated by hatred to the Spaniards, or the sentiments of honour, advised war. The priests, whose authority in this, as well as in other matters, was highly respected, declared strongly against peace ; alleging several pretended oracles of their gods, whose indignation ought to be dreaded if they yielded to the claims of those cruel enemies of their worship, and whose protection ought to be implored with prayers and sacrifices. This opinion at last prevailed, from the superstitious fear which had seized their minds ; and, accordingly, they answered the Spanish general, that they would continue the war, for they were determined to defend themselves to the last breath. If they had not been moved to this resolution by superstition, but by a sense

senſe of honour, from the love of their country and native liberty, they would not have been ſo blameable ; for, although they ſaw their ruin inevitable in continuing the war, they had not much hope of bettering their fortune by means of peace. The experience of paſt events did not permit them to confide in the promiſes which were made them ; on which account they muſt have repreſented to themſelves, that it was more conſiſtent with ideas of honour to die with their arms in their hands in defence of their native country and liberty, than to abandon all to the ambition of thoſe ſtrangers, and reduce themſelves by a ſurrender to a wretched ſtate of ſlavery.

Two days after the defeat of the Spaniards, ſome meſſengers ſent from the city of Quauhnahuac arrived at the camp of Cortes, to complain of the great injuries done them by their neighbours the Malinalcheſe, who, according to their affirmations, were going into confederacy with the Coahuicas, a very numerous nation, on purpoſe to deſtroy Quauhnahuac, becauſe they had become the allies of the Spaniards, and afterwards to paſs the mountains to make an aſſault, with a large army, on the camp of Cortes. This general, although he felt himſelf rather in a ſtate to demand aſſiſtance than to give it, nevertheleſs, for the reputation of the Spaniſh arms, and to prevent the blow which was threatened, ſent the captain Andrea de Tapia with the meſſengers two hundred Spaniards, ten horſes, and a large number of allies, with orders to unite themſelves with the troops of Quauhnahuac, and to do every thing which he thought would conduce to the ſervice of his king, and the ſecurity of the Spaniards. Tapia executed all that was enjoined him by the general, and in a place ſituated between
Quauhnahuac

Quauhnhuac and Malinalca, had a pitched battle with the enemy, defeated and pursued them to the foot of the mountain, on whose top the city of Malinalca stood. He could not, according to his wish, make an assault upon it, as it was inaccessible to his cavalry, but he laid the country waste, and the ten days being now expired, which was the time of absence prescribed him, he returned to the camp.

Two days after, messengers from the Otomies of the valley of Tolloccan arrived at the same camp, praying aid against the Matlatzincas, a powerful and warlike nation of the same valley, who kept them continually at war, had burned one of their settlements, made many of them prisoners, and besides had agreed with the Mexicans to attack with all their forces the camp of Cortes, by the way of the main land while the Mexicans attacked them from the city. In the entries which the Spaniards had made into Mexico, they had sometimes heard the Mexicans threaten them with the power of the Matlatzincas, and Cortes now perceived, from the account of the Otomies, the great danger he would run, if he should give the enemy an opportunity of putting their design in execution. He would not trust this expedition to any other than the brave and gallant Sandoval. This indefatigable officer, although he had been wounded on the day of the defeat of Cortes, had acted for some days as general, incessantly going round the three camps, making the best disposition for their security. Scarcely fourteen days elapsed after the defeat of Cortes, when he marched towards the valley of Tolloccan with eighteen horses, a hundred Spanish infantry, and sixty thousand allies. In their way they saw some marks of devastation committed by the Matlatzincas, and when they entered

entered the valley, they found a settlement newly laid in ruins, and saw the troops of the enemy loaded with spoils, which however they quickly abandoned as soon as the Spaniards appeared, in order to be sooner ready for battle. They passed a river which crosses the valley, and stood upon its border waiting for the Spaniards. Sandoval forded it intrepidly with his army, attacked the enemy, put them to flight, and chased them for nine miles into a city, where they took refuge, leaving more than a thousand of them dead on the field. Sandoval laid siege to the city, and forced the enemy to abandon it, and betake themselves to a fortress built on the top of a steep mountain. The victorious army entered the city, and, after having plundered it, set fire to the buildings; and because it was then late in the day, and the troops wearied, they reserved the assault of the fortress till the following morning, when, however, although expecting to meet with a strong opposition, they found the fortress evacuated. Sandoval determined, as he returned, to pass through some settlements which had also declared themselves hostile to the allies of the Spaniards; but he had no occasion to make use of arms against them, for they were so intimidated at seeing so great an army, which was much augmented by numerous troops of the Otomies, that they immediately surrendered. Sandoval treated them with the greatest mildness, and requested of them that they would persuade the nation of the Matlatzincas to enter into friendship with the Spaniards, by representing to them the advantages which they would derive from it; and, on the contrary, the misfortunes which might spring from their enmity to them. Those expeditions proved of the utmost importance, for four days after Sandoval had returned, several Matlatzincan,

latzincan, Malinalchefe, and Cohuixcan lords, arrived at the camp of Cortes, to make an excuse for their hostilities, and to establish a confederacy, which was most strengthening to the Spaniards, and eminently prejudicial to the Mexicans.

From the side of the main land, or continent, the Spaniards had no more enemies to alarm them, and Cortes had under his direction such an excessive number of troops, that he was able to have employed in the siege of Mexico more people than Xerxes sent against Greece, if from the nature of the site of that capital, such a multitude of besiegers would not have been rather a hindrance. The Mexicans, on the contrary, found themselves forsaken by their friends and their subjects, surrounded by enemies, and oppressed by famine. That unfortunate capital had armed against it, the Spaniards, the kingdom of Acolhuacan, the republics of Tlascala, Huexotzinco, and Cholula, almost all the cities of the Mexican vale, and the populous nations of the Totonacas, Mixtecas, Otomies, Tlahuicas, Cohuixcas, Matlatzincas, and others; so that, besides external enemies, more than half of the empire had conspired for its ruin, and the other part stood neuter in its cause.

While the commander Sandoval was displaying his courage against the Matlatzincas, the general Chichimecatl gave a signal instance of his against the Mexicans. This famous general, when he saw that the Spaniards, after their defeat, stood upon the defensive only, resolved to make an entry into Mexico with his Tlascalans alone. He set out with this view from the camp of Alvarado, where he had constantly been stationed since the beginning of the siege, accompanying the Spaniards in all their engagements, and every where signaling his bravery.

bravery. He took on this occasion all the ditches in the road of Tlacopan, and leaving four hundred archers as a guard to the most dangerous pass, that they might secure his retreat, entered with the main body of his troops into the city, where he had a terrible encounter with the Mexicans, in which many were killed and wounded on both sides. The Mexicans flattered themselves they would have been able to have defeated them in their retreat, as they passed the ditch; but by the arms of the archers posted there on the opposite bank, he passed it safely with his Tlascalans, and returned full of glory to the camp.

In order to revenge this audacious attempt of the Tlascalans, the Mexicans one night attacked the camp of Alvarado; but having been heard in their approach by the centinels, the Spaniards and allies ran to arms. The engagement lasted three hours, during which time Cortes having heard from his camp the cannonade, and suspecting the cause of it, it appeared to him to be a proper time to make an entry into the city with his people, who were now cured of their wounds. The Mexicans, who had gone to Tlacopan, not being able to overcome the resistance made by the Spaniards, returned to the city, where they found Cortes with his army: they fought with spirit, but without any considerable advantage being gained by either party.

At this same time, when there was the greatest necessity of arms and ammunition, a vessel arrived at Vera Cruz, and which brought new supplies to the Spaniards, by which they were put in a state fit to continue their operations. The prince D. C. Ixtlilxochitl had advised the Spanish general not to exhaust himself in new assaults, in which his army might suffer too much; that
without

without exposing himself to such an evil, or ruining the beautiful edifices of the capital, he would be able to make himself master of it, merely by hindering the introduction of any supplies; for the more numerous the besieged were, the sooner they would consume the few provisions they had left. Cortes was not inattentive to the acuteness of this advice, and valued it the more, as it came from a person, who from youth and intrepidity of temper, might rather have desired an occasion of displaying his bravery: but he could only adhere to it for a few days. Becoming soon weary of the tediousness of the siege, he re-commenced former hostilities, though not without first making propositions of peace to the Mexicans, drawing a comparison to them between his and their forces, and repeating the reasons which he had formerly urged. The Mexicans answered, that they would never lay down their arms until the Spaniards set off to their own country.

Cortes now seeing the resolution of the Mexicans, after forty-five days of siege, and that the more he made overtures of peace the more obstinately they rejected them, determined not to make another step into the city, without destroying every building on either side of the road, not only to prevent the mischief which the troops suffered from the terraces, but likewise to force the besieged, by constant hostilities, to accept of his propositions. He applied, therefore, and obtained from his allies, some thousands of their villagers and peasants, furnished with instruments fit for demolishing buildings and filling up ditches. For some days following he made several entries into the city, with his Spaniards and brigantines, and upwards of a hundred and fifty thousand allies, demolishing every house, filling up all

the ditches, and diminishing the number of his enemies by death, although not without the utmost peril to his own person and his people; for he was nearly made a prisoner, when he was relieved by his own soldiers, and his troops were sometimes obliged to escape the fury of the enemy by flight. Some Spaniards and allies perished in those encounters, and two brigantines were almost captured by a fleet of canoes; but a third coming up to their assistance, extricated them from the danger.

In those entries several Spanish women made themselves famous by their bravery (*q*): they voluntarily accompanied their husbands to war, and, from the continual hardships they underwent and the examples of valour which they had always before their eyes, were in a manner become soldiers: they kept guard, marched along with their husbands, armed with breast-plates of cotton, shields, and swords, and threw themselves intrepidly into the midst of the enemy, adding in spite of their sex to the number of the besiegers.

On the twenty-fourth of July they made a new entry into the city with a greater number of troops than on the preceding days; and, vigorously bent on conquest, the Spaniards at last got possession of that road by which the large road of Iztapalapan communicated with that of Tlacopan; the object which Cortes had so ardently longed to accomplish, for the free communication of his with the camp of Alvarado. They took by assault and afterwards filled up several ditches, and burned and destroyed many buildings; among others, a palace of king Quauhtemotzin, which was a vast and strong edifice surrounded

(*q*) Those women were Maria de Estrada, whose courage we have formerly mentioned, Beatrice Bermudez de Valasco, Juanna Martin, Elizabetha Roderiguez, and Beatrice Palacios.

rounded with intrenchments. The Spaniards that day remained masters of three of the four quarters of the capital, the besieged being now reduced to the part of Tlatelolco, which, on account of there being more water in it, was more strong and secure.

From a Mexican woman of rank, taken in the last assault, the Spanish general learned the miserable state of the city, through the scarcity of provisions and the discord prevailing among the besieged : for the king, and his relations, and many of the nobles, were determined to die rather than surrender ; while the people were discouraged and weary of the siege. Her account was confirmed by two deserters of inferior rank, who were impelled by hunger to come to the camp of Cortes.

Upon gaining this intelligence, Cortes resolved not to let a day pass without entering the city, until he took or ruined it ; he therefore returned with his army on the twenty-fifth, and got possession of a large road, in which there was so great a ditch that the whole day was not time sufficient to stop or fill it up. They demolished or burned all the houses of that quarter, in spite of the resistance of the enemy. The Mexicans, on beholding the allies busied in razing the houses, cried out to them, “ Demolish, ye traitors ! lay those houses in ruin, for “ afterwards you will have the labour of repairing “ them.” “ We,” answered the allies, “ will unquestionably rebuild them, if you should be conquerors ; “ but if you should be conquered, yourselves must re- “ build them, and your enemies inhabit them.” The Mexicans being unable to repair the buildings, made little fortifications of wood on the roads to annoy the besiegers from them as they had done from the terraces ; and to impede the motions of the Cavalry, they strewed the
the

the square with large stones ; but the besiegers made use of them to fill up the ditches.

In the entry which was made on the twenty-sixth, two large ditches were taken, which had been recently dug by the Mexicans. Alvarado in his quarter was daily advancing farther into the city, and on the twenty-seventh pushed so far, taking several ditches and intrenchments, that he came at last to occupy two towers neighbouring to the palace where king Quauhtemotzin resided ; but he could proceed no farther on account of the great difficulty he found from other ditches, and the gallant resistance of the enemy, who obliged him to retreat, charging furiously upon his rear-guard. Cortes having observed an extraordinary smoke which arose from those towers, made by way of signal, and suspecting that which had actually happened, entered as usual into the city, and employed the whole day in repairing every bad step. He wanted but one canal and one intrenchment to come at the square of the market ; he determined to push on until he got there, which at last he effected ; and then, for the first time after the commencement of the siege, his troops met with those of Alvarado, to the inexpressible satisfaction of both. Cortes entered with some cavalry into the square, and found innumerable people there, lodged in the porticos, the houses of that district not being sufficient to contain them. He mounted the temple, from whence he observed the city, and perceived, that of the eight parts of which it consisted, only one remained to be taken. He ordered his people to set fire to the lofty and beautiful towers of that temple, where, as in the greater temple of Tenochtitlan, the idol of the god of war was adored. The Mexican populace, on seeing the great flame which arose from

from thence and seemed to reach the clouds, uttered deep lamentations. Cortes, moved with pity at seeing so great a body of people reduced to the utmost distresses, commanded all hostilities to cease for that day, and new proposals to be made to the besieged, if they would surrender; but they answered, that they never would, and that while but one Mexican remained alive he would continue the defence till death.

Four days having passed without hostilities, Cortes entered anew into the city, and encountered with a large crowd of miserable creatures, of men, women, and young children, emaciated and almost dying of hunger; the famine being so great, that many of them lived solely upon herbs, marsh roots, insects, and even the bark of trees. The general, compassionating such wretches, ordered his troops not to do them any hurt, and passed on to the square of the market, where he found the porticos filled with people who were unarmed; a certain token of the despondency of the people and their displeasure at the obstinacy of the king and the nobles. The greater part of that day was employed in negotiations for peace; but Cortes finding that nothing would avail, ordered Alvarado to advance with an armed body through a great road where there were more than a thousand houses, while he with all his army made an attack in another quarter. The slaughter which they made of the besieged that day was so great, that there were upwards of twelve thousand killed and taken prisoners. The allies raged so cruelly against these unhappy victims, that they spared neither age nor sex, the severe orders of the general being of no effect to control them.

The

The next day Cortes returned with all his forces, but commanded them to do no hurt to the besieged, moved not less by the compassion which the sight of their misery excited than the hope he had of inducing them to surrender. The Mexicans seeing such a host of enemies come against them, and among them their own subjects who had formerly served them and now threatened them with ruin, finding themselves reduced to the most distressing situation, and viewing before their eyes so many objects of affliction, having hardly a place to set a foot upon, except the dead bodies of their citizens, vented their anguish in horrid cries, and demanded death as the only cure for their pitch of misery. Some of the common people requested Cortes to treat with some nobles who defended an intrenchment about an accommodation : Cortes went to them, but with little hopes of success to his propositions : they happened to be some of those persons who could no longer endure the severity of the siege. When they saw Cortes advancing towards them, they called out with the accents of desperation, “ If you are
“ the child of the sun, as some do imagine, when your
“ father is so swift that in the short space of a day he
“ finishes his airy course, why are you so tedious in delivering us from all our calamities by death ? We
“ would die, that we may pass to heaven, where our
“ god Huitzilopochtli waits to give us the repose and
“ reward our fatigues and services and sacrifices to him
“ have earned.” Cortes made use of various arguments to move them to a surrender ; but, as they answered that it was not in their power, nor had they any hope of persuading the king to it, he withdrew, in order to make a solicitation to the same purpose by means of an illustrious person whom he had three days before
made

made a prisoner ; he was an uncle of the king of Tezucuo ; him he charged, though wounded, to go to Tlatelolco to confer on the subject with the king : but he saw no other fruits of his embassy than the clamours of the people repeated, with which they demanded their deaths. Some Mexican troops made a desperate assault on the Spaniards, but they were so enfeebled by the want of common sustenance, that their efforts made little impression, and the repulse of their enemies was too strong to be withstood.

Cortes returned the day following to the city, expecting every moment that the Mexicans would surrender ; and, without allowing any hurt to be done them, he directed his way to some persons of eminence stationed in an intrenchment, who were known to him from the first time he had been at that court, and demanded of them why they would defend themselves so obstinately, being unable for more resistance, and finding themselves in such a state that with one blow he could take away every life among them. They answered, that they saw most clearly that their ruin was inevitable, and they would willingly have prevented it, but it did not lie with them to determine the point. They offered however to petition the king to listen to propositions of peace. They accordingly went immediately to the palace, and in a short time after returned, saying that it was so late in the day, the king could not come, but that they did not doubt he would meet with Cortes in the same place to-morrow. There was in the centre of this place a large square terrace, where the Mexicans made their theatrical representations, as we have already mentioned. Cortes ordered tapestries and little stools or chairs to be placed on this theatre, on purpose to hold the desired conference, and a good entertainment to be provided for the king
and

and the nobility who might accompany him. The day being arrived, he sent notice to the king that he waited for him at that place; but the king returned five respectable persons, to apologize for his not coming in person, on account of an indisposition he had, and because he could not place confidence in the Spaniards. Cortes received them with the greatest benignity, gave them an elegant banquet, and sent them back to the king, to request him in Cortes's name to come to that interview without fear; as he pledged his faith to pay due respect to his royal person, that his presence was absolutely necessary, and nothing could be concluded without him; and accompanied this embassy with a present of provisions, which at this juncture was the more valuable. The ambassadors, after discovering in the course of the entertainment the great necessities they suffered, retired, and about two hours after returned, bearing Cortes a present of the finest garments, which were sent him by the king, and a repetition of his former excuses. Three days were spent in those negotiations to no effect.

Cortes had given orders to the allies to remain without the city, as the Mexicans had requested him not to allow them to be present when he held a conference with the king; but having now lost every hope of an accommodation, he recalled all the troops of his camp, in which there were upwards of one hundred and fifty thousand men, and those also of the camp of Alvarado; and with all those forces collected he began to form some ditches and intrenchments, which were the strongest fortifications remaining to the Mexicans, and at the same time Sandoval with his army attacked the city in the quarter of the north. Of all days this was the most unfortunate for that city, as on it the Mexican blood was
most

most lavishly spilt; the wretched citizens, having now neither arms to repel the multitude and fury of their enemies, strength to defend themselves, nor space to fight upon; the ground of the city was covered with dead bodies, and the water of every ditch and canal purpled with blood. Nothing was to be seen but slaughter and ruin, and nothing was heard but piteous moans and cries of desperation. The allies grew still more cruel against that miserable people, and gave the Spaniards more trouble to check their fierceness and inhuman rage, than to combat with the enemy. The havoc made of the Mexicans that day was so great, that, according to the account of Cortes himself, the number of victims exceeded forty thousand.

The intolerable stench arising from so many unburied dead carcases, obliged the besiegers at this time to withdraw from the city: but the day after, being the thirteenth of August, they returned, to give the last assault to that district of Tlatelolco which yet remained in the possession of the Mexicans. Cortes carried three pieces of artillery with him, assigned to each captain the place where he was to make the assault, and commanded them to make every exertion to force the besieged to throw themselves upon the water towards that place where he expected Sandoval with the brigantines, which was a sort of harbour entirely surrounded with houses, where the vessels of the merchants used to come on shore when they came to the market of Tlatelolco; and, above all, to endeavour to seize the king Quauhtemotzin, as that was sufficient to render them masters of the city, and to put an end to the war: but before he proceeded to this decisive blow, he made new attempts to bring about an accommodation. He was induced to this, not only from

compassion on so many wretched people, but likewise from the desire of making himself master of the royal treasures and those of the nobility; for if this last part of the city was taken by assault, the Mexicans, when bereft of every hope of saving their riches, might throw them into the lake, that the victors might not enjoy them; and in case that was not done, they would be seized by the allies, who, from being innumerable and more acquainted with the houses, would leave little or nothing to the Spaniards in the disorder and confusion of the assault. He, for this purpose, went to an eminence to speak with some respectable Mexicans who were well known to him, represented to them their extreme danger, and requested them to make new applications to the king, to consent to that conference which he so much desired for the good of the kingdom, himself, and all his subjects; for that, if he persisted in his purpose of defending himself, he was determined not to leave a Mexican alive that day among them. Two of those nobles took upon them to persuade the king, but they were no sooner gone than they returned, accompanying the *Cihuacoatl*, or supreme magistrate of the court. He was received by Cortes with many tokens of cordiality and respect; but, with an air of sovereignty, by which it appeared he designed to shew his mind superior to all calamities, he said to Cortes, "Spare me, O general! the trouble of soliciting a conference for you with my king and lord Quauhtemotzin: he is resolved to die rather than appear before you: I cannot express to you how painful his resolution is to me; but there is no remedy: you, however, will follow the counsel you think proper, and act agreeable to your designs." Cortes told him

to

to go and prepare the citizens for the death which they would soon suffer.

In the mean time, numerous bodies of women and children and low people came to surrender themselves to the Spaniards, hastening to extricate themselves from the impending danger; some of them, however, perished, in attempting to swim across the ditches, for want of strength. Cortes ordered no injury to be offered to those who surrendered, and stationed some Spaniards in different places, to check by their authority the barbarous cruelty of the allies; but in spite of his orders, more than fifteen thousand men, women, and children, perished in the hands of those furious and inhuman troops.

The nobles and warriors who remained obstinate in their resolution to defend themselves to the last moment, occupied the terraces of the houses and some of their paved roads. Cortes observing that it was late and that they did not choose to surrender, made some shots of artillery be fired upon them; but that not being sufficient, he discharged an arquebuse as a signal for the assault. All the besiegers made the attack at once, and pressed so hard upon the feeble and harassed citizens, that finding no place within the city to fly to, to defend themselves from the fury of so numerous an enemy, many threw themselves into the water, and others came to surrender themselves to the conquerors. The Mexicans had prepared vessels, to save themselves by flight from the fury of the enemy; but Cortes having been aware of this resource for escape, had given orders to Sandoval to take possession with the brigantines of the port of Tlatelolco, and to seize every bark. In spite of the utmost diligence employed by Sandoval,

doval, many escaped and among others, the one which carried the royal personages. This active commander having discovered it, ordered Garcia de Holguin, the captain of the swiftest brigantine, to give chase; he made such speed that in a short time he came up with it, and the Spaniards were preparing to fire into it, when they ceased their oars and threw down their arms in token of surrender. In that large vessel, or piragua, were the king of Mexico Quauhtemotzin, the queen Tecuichpotzin his wife, Coanacotzin the king of Acolhuacan, Tetzpanquetzaltzin the king of Tlacopan, and other persons of rank. The brigantine boarded them, and the king of Mexico advancing towards the Spaniards, said to the captain, "I am your prisoner: I have no favour to ask, but that you will shew the queen my wife and her attendants the respect due to their sex and rank." And, taking hold of the queen by the hand, he passed with her into the brigantine. Observing afterwards, that the Spanish captain looked anxiously after the other vessels, he told him that he needed not doubt, that as soon as they all knew that their sovereign was prisoner they would come to die with him.

The captain Holguin conducted those illustrious persons to Cortes, who was then upon the terrace of a house in Tlatelolco. He received them with every mark of respect and humanity, and made them sit down. Quauhtemotzin, with much greatness of mind, told him, "I have done, brave general! in defence of myself and my subjects, every thing which the honour of my crown and regard for my people demanded; but as my gods have been against me, I see myself now deprived of my crown and my liberty: I am now your prisoner; at your pleasure dispose of my person:" and putting his hand upon

upon a dagger which Cortes wore at his girdle, he added, "with this dagger take that life from me which I have not lost in the defence of my kingdom." Cortes strove to console him, with many arguments, declaring that he did not consider him as his prisoner, but the prisoner of the greatest monarch of Europe, from whose clemency he ought to trust, that not only the liberty which he had lost, but also the throne of his illustrious ancestors, which he had so worthily occupied and defended, would be restored to him. But what solace could he have from such declarations, or what confidence could he put in the words of Cortes, who had always been his enemy, and after having seen that though the friend and protector of Montezuma, both were not sufficient to save to that monarch his crown, his liberty, or his life? He desired of Cortes, that he would do no hurt to his subjects; and Cortes in return desired of him, that he would command them all to surrender. Both gave their orders, and both were instantly obeyed. It was ordered also, that all the Mexicans should leave the city without arms or baggage; and according to the affirmation of an eye-witness of the utmost sincerity (*r*), for three days and three nights all the three roads leading from the city were seen full of men, women, and children; feeble, emaciated, and dirty, who went to re-

cover

(*r*) "Es verdad y juro amen que toda la laguna y casaf y barbacoas estaban llenas de cuerpos y cabezas de hombres muertos; que yo no sè de que manera lo escriba; pues en las calles y en los mismos patios de Tlatelolco no habia otras cosas y no podiamos andar, sino entre cuerpos y cabezas de Indios muertos. Yo he leido la destrucion de Jerusalem; mas si en ella hubo tanta mortandad como esta yo no lo sè," &c. Bernal Diaz, chap. 156. of his history. Such expressions, from an eye-witness of great sincerity, who was not given to exaggeration, convey to us a just idea of that horrid slaughter. We suspect that the Mexicans left the dead bodies unburied, that the stench of them might drive away the besiegers; as otherwise it is probable that on account of their strict attention to funeral rites, they would have removed them all.

cover in other places of the empire. The fetid smell, which so many thousand putrid bodies emitted, was so intolerable, that it occasioned some sickness to the general of the conquerors. The houses, the streets, and the canals, were full of disfigured carcases; the ground of the city was in some places found dug up by the citizens, who searched under the earth for roots to feed on, and many trees were stripped of their bark, to supply the exigencies of famine. The general caused the dead bodies to be buried, and large quantities of wood to be burned through all the city, as much in order to purify the infected air as to celebrate his victory.

The news of the taking of the capital spread quickly through all the land; most of the provinces of the empire acknowledged obedience to Cortes, though some few for two years after continued to war upon the Spaniards. The allies returned to their native districts, joyful beyond measure with their prey, and gratified in extreme to have shaken and convulsed that court whose dominion they never could brook, and whose arms kept them in perpetual uneasiness; never perceiving, that with their own hands they had been forming the chains which were to fetter their liberty, and that when that empire was fallen, all the other nations of the region must be degraded and enslaved.

The plunder was greatly inferior to the hopes and expectations of the conquerors. The garments and apparel which they found in the capital were divided among the allies: those works of gold, silver, and feathers, which, on account of the singularity of their workmanship were preserved entire, were sent as presents to the emperor Charles V. all the rest of the gold, which was melted, hardly amounted to nineteen thousand two hundred

hundred ounces (*s*); not only because the Mexicans threw the greater part into the lake (*t*), but also because individuals both Spaniards and allies, endeavoured in plundering, to recompense themselves secretly for their hardships and toils.

The taking of that capital happened on the thirteenth of August, 1521, one hundred and ninety-six years after the foundation of it by the Aztecas, one hundred and sixty-nine years after it was erected into a monarchy, which was governed by eleven kings. The siege of Mexico, something resembling in the disasters and slaughters with which it was attended that of Jerusalem, lasted seventy-five days; during which time, of two hundred thousand and more allies, some thousands perished; and of nine hundred Spaniards, more than one hundred were killed and sacrificed. The number of the Mexicans killed is not known; but according to the account of Cortes and Bernal Diaz, and what other historians say on that subject, it appears that the slain exceeded one hundred thousand in number. With respect to those who died by famine, or sickness occasioned by the brackish water which they drank and the infection of the air, Cortes himself affirms they were more than fifty thousand. The city appeared one complete ruin. The king
of

(*s*) Cortes says, that the gold which was melted down weighed one hundred and thirty thousand *castellanos*, equal to nineteen thousand two hundred ounces. There were among the spoils sent to Charles V. pearls of an enormous size, most valuable gems, and some curious works of gold. The ship in which they were carried was taken by I. Florin, a famous French pirate, and the treasure was sent to the court of France; which authorised such depredations, under the not less famed than frivolous pretence, that the Most Christian king was a son of Adam as well as the Catholic king.

(*t*) Bernal Diaz says, that he saw some things of gold got up out of the lake, and amongst others, a sun similar to that which Montezuma sent to Cortes when he was on the coast of Chalchiuhcuecan.

of Mexico, in spite of the magnificent promises of the Spanish general, was in a few days put ignominiously to the torture, which he bore with unshaken firmness, that he might declare where the immense riches of the court and temples were deposited (*u*); and in three years after, was hanged, together with the kings of Tezcuco and Tlacopan, on account of some suspicious circumstances in their conduct (*x*). The Mexicans, and all the nations that contributed to their ruin, notwithstanding the humane and benevolent dispositions of the Catholic kings, remained abandoned to misery and oppression, and the contempt not only of the Spaniards, but even of the lowest African slaves and their infamous descendants.

Thus,

(*u*) The torture given to king Quauhtemotzin, was burning his feet slowly after they were anointed with oil. An intimate friend of the king voluntarily shared his sufferings, and died under the torment. Bernal Diaz also adds, that the king of Tlacopan was tortured along with him. Cortes, in spite of his abhorrence of this act, was driven to it by the suggestions and insinuations of some avaricious Spaniards, who suspected that he had intended not to put the king to the torture in order to possess himself secretly of all the royal treasure.

(*x*) Quauhtemotzin king of Mexico, Coanacotzin king of Acolhuacan, and Tetzlepanquetzaltzin king of Tlacopan, were hanged upon a tree in Izancanac, the capital of the province of Acallan, on one of the three days preceding Lent of the year 1525. The occasion of their death was, some discourse they had among themselves relative to their misfortunes, in which they insinuated how easy it would be for them if they inclined to kill Cortes and the Spaniards and to recover their liberty and their crowns. A Mexican traitor, in order to gain the favour of the Spanish general, communicated what had been said, but altered the sense of the words, and represented the casual remarks of conversation as a formed conspiracy against him. Cortes, who was then on his journey towards the province of Comajahua, with a few Spaniards almost exhausted by fatigue, and upwards of three thousand Mexicans whom he carried along with him, was persuaded there was no way of shunning the danger which threatened him, but putting the three kings to death. "This sentence," says Bernal Diaz, "was extremely unjust, and much blamed by all who were travelling with him that day." It occasioned some watchings and melancholy to Cortes.

Thus, it has been said, in conducting the Spaniards, a polished nation of Europe, to overturn the rude monarchy of the Mexicans, in America, did Providence punish the latter for the injustice, cruelty, and superstition of their ancestors. But there the victors, in one year of merciless massacre, sacrificed more human victims to avarice and ambition, than the Indians during the existence of their empire had devoted in worship to their native gods; there the legislative art of Europe corrected the bloody policy of American tribes, and introduced the ministry of justice, by despoiling Indian caziques of their territories and tributes, torturing them for gold, and enslaving their posterity: and there the mild parental voice of the Christian religion was suborned to terrify confounded savages with the malice of a strange, and by them unprovoked, God; and her gentle arm in violence lifted up, to raze their temples and hospitable habitations, to ruin every fond relic and revered monument of their ancestry and origin, and divorce them in anguish from the bosom of their country.

ALBERTA

1911-12

THE UNIVERSITY OF ALBERTA
EDMONTON, ALBERTA
CANADA

APPENDIX:

CONTAINING

DISSERTATIONS

ON

THE LAND, THE ANIMALS, AND THE INHABITANTS OF MEXICO:

IN WHICH

The ANCIENT HISTORY of that COUNTRY is confirmed, many POINTS of NATURAL HISTORY illustrated, and numerous ERRORS refuted, which have been published concerning AMERICA by some celebrated modern AUTHORS.

INTRODUCTION.

THE Dissertations which we enter upon are both useful and necessary, to illustrate the ancient history of Mexico, and confirm the truth of many points maintained in it. The first Dissertation is requisite, to supply the defective knowledge we have respecting the first population of that new world. The second, though tedious and less calculated to interest, ought not to be omitted, in order that we may know the foundations of our chronology ; and will prove useful to whoever may hereafter write the history of Mexico. All the others are equally important, to guard incautious readers from the mistakes and deceptions they would otherwise be led into, by the crowd of modern authors, who, without possessing sufficient knowledge, have not been ashamed to write on the land, the animals, and inhabitants of America.

Any person who reads the work of M. de P. must entertain a thousand ideas contrary to the sincerity of our history. He is a philosopher of the present fashion, and learned ; particularly on certain subjects, where it is his misfortune to be wise ; and ignorance would have been his bliss. He mingles insult and buffoonry in his discourses ; enters without respect into the house of God, and sheds malevolence and invective from his pen without reverence for truth or feelings for innocence. He decides rashly, and in a magisterial tone ; incessantly cites the writers of America, and declares his work to be the fruit

fruit of ten years toil. This he means should recommend him with many readers of this philosophic age, who esteem nothing but philosophy, and think those men philosophers only who satirize religion and talk in the language of impiety.

The attempt made by M. de P. is to persuade the world, that in the vast region of America all nature has degenerated; in the plants, in the animals, and in the inhabitants. The earth, incumbered with lofty mountains and rocks, and in the plains deluged with stagnant and corrupted waters, or covered with woods so vast and so thick, that the sun's rays never penetrate them, is, he says, generally barren, and more abounding in poisonous plants than all the rest of the world: the air unwholesome, and more cold than that of the other continent: the climate unfavourable to the propagation of animals: all the animals native to these countries were smaller, more deformed, feeble, cowardly, and stupid, than those of the ancient world; and those which were transported there soon degenerated, as well as all the plants transplanted there from Europe: the men hardly differed from the beasts, except in figure; but even in this, many marks of degeneration appear; their colour olive, their heads extremely hard and armed with coarse thick locks, and the whole of the rest of their bodies totally destitute of hair: they are brutal and weakly, and subject to many violent disorders, occasioned by the insalubrity of their climate; but however their bodies may be formed, their minds are still more imperfect; they are so irretentive in memory, that they forget to-day what they did yesterday; they can neither reflect nor order their ideas, nor are capable of improving them, nor of thinking, because their brains circulate only gross
viscous

viscous humours; they are insensible to the desires of love, or any other passion; their sloth holds them sunk in a savage state; their cowardice was made manifest at the conquest; their moral vices are correspondent to their physical defects; drunkenness, lying, and pederasty, were common in the islands, in Mexico, Peru, and over all the new continent; they lived without laws; the few arts they knew were very rude; agriculture was totally neglected by them, their architecture pitiful, and their utensils still more imperfect: in the whole new world were only two cities, Cuzco in South, and Mexico in North America, and even these constituted but miserable hamlets, &c.

This is a slight sketch of the monstrous picture which M. de P. draws of America: we do not give it at length, nor say how other authors, as ill informed or strongly prejudiced as he is, have represented it: it would waste too much time to copy their absurdities and errors; neither do we intend to make the apology of America or the Americans; that would require a very voluminous work: to write an error, two lines are sufficient; two pages, or two sheets may not be sufficient to refute it: we shall therefore, reply to those only which affect the truth of our history: we have chosen the work of M. de P. because in it the errors of most others are collected.

Although M. de P. is the principal author to whom we direct our animadversions, we shall have occasion to remark upon others, and, among those, on Count de Buffon. We have the utmost esteem for this celebrated author, and consider him the most diligent, the most accurate, and most eloquent naturalist of the age; perhaps there never was in the world one who made such progress in the knowledge of animals as he has done; but

as

as the subject of the work he has undertaken is so vast and so various, it is not wonderful that he has sometimes erred, or forgot what he has written with respect to America, where nature is so inexhaustible; the mistakes, therefore, or proofs we may adduce of his errors, can have no influence on the reputation of one so deservedly respected by the learned world.

In the quotations of the History of Quadrupeds of count de Buffon, we made use of the Paris edition, in thirty-one volumes, twelves, concluded in the year 1768. In those of the work of M. de P. we have used the London edition of 1771, in three volumes, including the answer made him by Don Pernety, and reply of M. de Paw.

DISSER-

DISSERTATION I.

On the Population of AMERICA, and in particular that of MEXICO.

NO problem in history has been more difficult of solution than the population of America, or has occasioned a greater diversity of opinions. Ancient philosophers were not more divided concerning the supreme good than the moderns about this. To examine them all would be a fruitless labour. Neither do we intend to establish a new system, having no foundation to support one: we mean simply to offer and submit to the judgment of the learned a few conjectures, which we presume may not be useless. In order to proceed with clearness and precision, we shall divide our general subject into several parts, and explain our sentiments on each separately.

S E C T. I.

At what Period America began to be peopled.

BETANCOURT, and other authors, are persuaded, that the new world began to be peopled before the deluge. That certainly might have happened, because the space of one thousand six hundred and fifty-six years elapsed from the creation of the first man until the deluge, according to the chronology of the Hebrew text of Genesis, and our common reckoning; and still more, the space of two thousand two hundred and forty-two, or two thousand two hundred and sixty-two years, according to the computation of the Seventy, was certain-

ly enough to people all the world, as has been already demonstrated by some writers; at least after ten or twelve centuries, some of those families which scattered themselves towards the most eastern parts of Asia, might pass to that part of the world which we call at present America, whether it was, as we believe, united to the other, or separated by a small arm of the sea from it. But how do those authors prove that America was peopled before the deluge? Because they say there were giants in America, and the race of giants was antediluvian. Because God, others will say, did not create the earth to remain uninhabited; and it is not probable that, after creating America for that purpose, he would leave it so long without inhabitants. Admitting the sacred text to be taken in the vulgar sense, and that the giants were men of extraordinary size and bigness, this would by no means confirm such opinion, because we read in the sacred writings also of giants posterior to the deluge. Neither does the text of Isaiah prove any thing in favour of that opinion, because although God created the earth to be inhabited, no one can divine the time prefixed by him for the execution of his designs.

The traveller Gemelli says, on the evidence of some ancient pictures of the Mexicans, that the city of Mexico was founded in the year II Calli, corresponding to the year 1325 of the creation or the world, that is, more than three hundred years before the deluge; but this erroneous absurdity was not an error of his mind but a slip of his pen, as plainly appears from the context of his narration; wherefore he is unjustly reprobated by Mr. de P. who also accuses Siguenza of the same error, whereas we are very certain this most learned Mexican was of a very different opinion. It is true that the city
of

of Mexico was founded in the year II Calli, and that that was the year 1325, not of the world, however, but of the vulgar era, which the above mentioned traveller certainly meant to have written.

It is therefore useless to investigate whether America was peopled before the deluge, because on one hand although we were able to discover it, on the other we are certain, that all men perished in the deluge. We are therefore obliged always, after that general inundation, to seek for new peoplers of America. We know that some writers circumscribe the deluge to a certain part of Asia; but we know also that that opinion is contrary to the Sacred Writings, to the traditions of the Americans, and physical observations.

Dr. Siguenza believed the population of America began not long after the dispersion of nations. As we have not the manuscripts of that celebrated Mexican, we are ignorant on what foundation he rested his opinion, which was very conformable to the tradition of the Chiapanese. Other authors, on the contrary, believe that population very modern, because the writers of the history of the Mexicans and Peruvians did not find among those nations any memory of their particular events farther back than eight centuries. But those authors confound the population of Mexico made by the Chichimecas and the Aztecas, with that which their ancestors had made many ages before in the northern countries of America, nor distinguished the Mexicans from other nations who occupied that country before them. Who can ascertain when the Otomies, Olmecas, Cuitlatecas, and Michuacanese entered into the country of Anahuac? It is not surprising that some writers of Mexico could not find any memorials more ancient than eight centuries; since,

since, besides the loss of the greater part of the historical monuments of those nations, as they did not know how to adjust the Mexican years with ours, they frequently committed gross anachronisms; but they who had procured greater abundance of the ancient and select paintings, and knew a little better how to trace the chronology of those people, such as Sigüenza and Ixtlilxochitl, found records certainly more ancient, and used them in their valuable manuscripts.

We do not doubt that the population of America has been very ancient, and more so than it may seem to have been to European authors. 1. Because the Americans wanted those arts and inventions, such, for example, as those of wax and oil for light, which, on the one hand, being very ancient in Europe and Asia, are on the other most useful, not to say necessary, and when once discovered, are never forgotten. 2. Because the polished nations of the new world, and particularly those of Mexico, preserve in their traditions and in their paintings the memory of the creation of the world, the building of the tower of Babel, the confusion of languages, and the dispersion of the people, though blended with some fables, and had no knowledge of the events which happened afterwards in Asia, in Africa, or in Europe, although many of them were so great and remarkable, that they could not easily have gone from their memories. 3. Because neither was there among the Americans any knowledge of the people of the old continent, nor among the latter any account of the passage of the former to the new world. These reasons, we presume, give some probability to our opinion.

SECT.

S E C T. II.

Who were the Peoplers of America.

THOSE who question the authority of the sacred writings say the Americans derive not their origin from Adam and Noah, and believe, or feign to believe, that as God created Adam that he might be the father of the Asiatics, also made before or after him other men, that they might be the patriarchs of the Africans, Europeans, and Americans. This does not arraign the authority of the sacred writings, says a modern author (*a*), because although Moses makes mention of no other first patriarch than Adam, it was owing to his having undertaken to write the history of no other people than the Israelites. But this is contrary to the tradition of the Americans, who in their paintings and in their hymns called themselves the descendants of those men who escaped from the general deluge. The Toltecas, Mexicans, Tlascalans, and all the other nations were agreed on this point. They all said that their ancestors came from elsewhere into those countries; they pointed out the road they had come, and even preserved the names, true or false, of those their first progenitors, who, after the confusion of languages, separated from the rest of men.

F. Nunez de la Vega, bishop of Chiapa, says, in the preface of his *Synodal Constitutions*, that in the visit which he made to his diocese towards the end of the last century, he found many ancient calendars of the Chiapanese, and an old manuscript in the language of that country, made by the Indians themselves, in which it was said, according

(*a*) The author of a miserable little performance, entitled, *Le Philosophe Douceur*, printed at Berlin, in the year 1775.

ing to their ancient tradition, that a certain person named *Votan* (*b*), was present at that great building, which was made by order of his uncle, in order to mount up to heaven; that then every people was given its language, and that *Votan* himself was charged by God to make the division of the lands of Anahuac. The prelate adds afterwards, that there was in his time in Teopixca, a great settlement of that diocese, a family of the surname of *Votan*, who were the reputed descendants of that ancient populator. We are not here endeavouring to give antiquity to the populator of America on the faith of the Chiapanese, but merely to shew that the Americans conceived themselves the descendants of Noah.

Of the ancient Indians of Cuba several historians of America relate, that when they were interrogated by the Spaniards concerning their origin, they answered, they had heard from their ancestors that God created the heavens, the earth, and all things; that an old man, having foreseen the deluge with which God designed to chastise the sins of men, built a large canoe, and embarked in it with his family, and many animals; that when the inundation ceased, he sent out a raven, which, because it found carrion to feed on, never returned to the canoe; that he then sent out a pigeon, which soon returned bearing a branch of *Hoba*, a certain fruit of America, in its mouth; that when the old man saw the earth was dry, he disembarked, and having made himself some wine of the wood-grape, he became intoxicated and fell asleep; that then one of his sons made ridicule of his nakedness, and that another son piously covered him; that, upon waking he blessed the latter, and cursed the former.

(*b*) *Votan* is the chief of those twenty famous men whose names were given to the twenty days of the Chiapanese month.

former. Lastly, that they drew their origin from the cursed son, and therefore went almost naked; that the Spaniards, as they were well clothed, descended perhaps from the other.

The Mexicans used to call Noah *Coxcox*, and *Teoci-pactli*; and the Michuacanese, *Tezpi*. They used to say, that there was once a great deluge, and that Tézpi, in order to save himself from being drowned, embarked in a ship formed like an ark, with his wife, his children, and many different animals, and several seeds of fruits; and that as the water abated, he sent out that bird which bears the name of *aura*, which remained eating dead bodies, and then sent out other birds, who did not return either, except that little bird (the flower-fucker) which was much prized by them on account of the variety of the colours of its feathers, that brought a small branch with it; and from this family they all believed they drew their origin. If therefore we refer to the sacred writings, or the traditions of those Americans, we must seek for the peoplers of America among the descendants of Noah.

But who were they? Which of the sons of Noah was the root of the American nations? D. Siguenza, and the very ingenious Mexican Sister J. Agnes de la Cruz, believed or conjectured, that the Mexicans, and other nations of Anahuac, were the descendants of Naphtuhim, son of Mezraim, and nephew of Cham. Boturini was of opinion, that they descended not only from Naphtuhim, but likewise from his other five brothers. The learned Spaniard Arias Montano was persuaded that the Americans, and particularly the Peruvians, belonged to the posterity of Ophir, fourth son of Shem. The rea-
sons

sions of this author are so weak that they do not merit mention. Of those of Siguenza we shall speak presently.

The other authors, who have not been willing to carry their inquiries so far into antiquity, have sought for the origin of the Americans in different countries of the world. Their opinions are so numerous and different, it is not easy to recite them. Some think they find the ancestors of the Americans in Asia, others trace them in Africa, and others from Europe. Among those who imagine they have found them in Europe, some have supposed their ancestors the Grecians, others the Romans, others the Spaniards, others the Irish, others the Courlanders, and some the Russians. Among those who report them originally from Africa, some make them the descendants of the Egyptians, some of the Carthaginians, and some of the Numidians. But there is no where greater variety of sentiment than among those who believe the population of America due to Asia. The Israelites, the Canaanites, the Assyrians, the Phœnicians, the Persians, the Tartars, the East Indians, the Chinese, the Japanese, all have their advocates among the historians and philosophers of the two last centuries. Some, however, not content to look for the populators in the known countries of the world, draw the famous isle Atlantida out of the waters of the ocean, to send colonies from it to America. But this is not extraordinary; since there are authors who, in order to do wrong to no people, believe the Americans the descendants of all the nations of the world.

So great a variety and extravagance of opinion is owing to a persuasion, that to make one nation be believed to have sprung from another, no more is necessary than to find some affinity in the words of their languages,

guages, and some fimilarity in their rites, customs, and manners. Such are the foundations of the above mentioned opinions, collected and illustrated with a great fhew of erudition, by the Dominican Garcia, and thofe learned Spaniards who reprinted his work with additions: which thofe who pleafe may confult, as we have no time to refute them.

We cannot, however, difpenfe with the mention of the opinions of D. Siguenza, adopted alfo by the famous bifhop F. P. Daniel Huet, as it appears to us to be the beft founded. Siguenza was perfuaded, that the nations which peopled the Mexican empire belonged to the pofterity of Naphtuhim, and that their anceftors, having left Egypt not long after the confufion of tongues, travelled towards America. The reafons on which he grounds this opinion are mentioned only in the *Bibliotheca Mexicana*. As we are deprived of his excellent manufcripts, we can only cite them, as Eguiara did, in the *Bibliotheca* above mentioned.

Thofe reafons, from what appears, are firft, the conformity of thofe American nations with the Egyptians in the conftruction of pyramidal edifices, and the ufe of hieroglyphics in the method of computing time, in their drefs, and in fome of their customs; and, laftly, the refemblance of the word *Teotl* of the Mexicans to the *Theuth* of the Egyptians, which occafioned bifhop Huet to adopt the fame fentiment with Siguenza. If this opinion is propofed as a conjecture, we fhall not contradict it; but if it is offered as a truth on which we are to depend, the proofs do not appear fufficient.

Siguenza conceived that the children of Naphtuhim fet out from Egypt towards America not long after the confufion of tongues; it would therefore be neceffary to

make the comparison of the customs of the Americans with those of the first Egyptians, not of their descendants who dwelt in Egypt many years after, and from whom the Americans are not believed to be descended. But who can imagine that the Egyptians, immediately after the dispersion of the people, began to build pyramids, and make use of hieroglyphics, and that from thenceforward they ordered and arranged their years and months in the form they had afterwards? All those things were certainly posterior to that epoch, nor was it necessary to have seen the pyramids of Egypt to make the Americans think of building such kind of edifices; for the mountains alone were sufficient to suggest them: whoever desires to build an edifice to immortalize his name, will easily think of making it in the form of a pyramid; because no other sort of building can be raised to the same height with so little expense and trouble, as the higher it rises the fewer materials in proportion are required. Besides, the Mexican edifices were entirely different from those of Egypt. The latter were truly pyramidal, the former not; they were composed of three, four, or five square or oblong bodies, of which the higher was less in amplitude than the lower; those of the Egyptians were in general hollow, those of the Mexicans solid; these served for the basis of their sanctuaries, those for the sepulchres of their kings. The temples of the Mexicans and other nations of Anahuac, were of a species so singular, that we do not know they were ever used by any other people of the world: on which account they ought to be considered as an original invention of the Toltecas or some other people more ancient than them.

In

In the mode of computing time, the Mexicans were much more similar to the Egyptians; that is, of the latter Egyptians, not of the former, of whose method we know nothing. The Egyptian solar year was composed of three hundred and sixty-five days, like that of the Mexicans: the one and the other contained three hundred and sixty-five days in their months, and as the Egyptians added five days to their last month *Mesori*, so did the Mexicans to their month *Izcalli*, in which particular they agreed with the Persians; but in other respects, there was a great difference between them; the Egyptian year consisted of twelve months and these of thirty days, the Mexican year consisted of eighteen months and these of twenty days (*c*). The Egyptians, like many other nations of the old continent, counted by weeks; the Mexicans by periods of five days in their civil and thirteen days in their religious year.

The Mexicans, like the Egyptians, employed hieroglyphics; but how many other nations have done the same to conceal the mysteries of their religions; and if the Mexicans learned hieroglyphics from the Egyptians, why had they not also the use of letters from them? Because letters, it may be said, were invented after their separation; but how is it known that before they separated they had made the invention of hieroglyphics?

The dress of the first Egyptians may have probably been the same as that of the other sons and nephews of Noah; at least we have no reason to think otherwise. Respecting the political customs of those first men we know nothing. The most ancient Egyptians, of whom we have any certain marks, were those who lived in the
times

(*c*) We speak of the religious year of the Mexicans, for of their civil or astronomical year we have no account.

times of the patriarch Joseph. If we mean to make a comparison of their usages mentioned in the sacred books with those of the Mexicans, instead of any similarity, we shall find the strongest difference between them. Lastly, we do not pretend to demonstrate the opinion of Siguenza to be false, but only to shew that it is not a truth upon which we can safely rely.

The extravagant M. de P. says, that the Mexicans derive their origin from the southern Apalachites; but he neither does nor can offer any reason to make such a supposition probable; and, although it were true, the difficulty would remain still unresolved with regard to the origin of the Apalachites themselves. It is true, that author finds little difficulty, as he sometimes gives us to understand that he is not unfavourable to the romantic system of La Peyrere.

With respect to the opinion we have ventured to form ourselves, we shall explain it in the following conclusions.

I. The Americans descended from different nations, or from different families, dispersed after the confusion of tongues. No person will doubt of the truth of this, who has any knowledge of the multitude and great diversity of the American languages. In Mexico we have already found thirty-five: in South America there are still more known. In the beginning of the last century the Portuguese counted fifty in Maragnon. It is true, that there is a great affinity between some of those languages, which shews that they are sprung from the same parent, namely, the *Eudeve*, *Opata*, and *Tanabumara*, in North America, and the *Mocobi*, *Toba*, and *Abipona* in South America; but there are many others also, as different from each other as the Illyrian from the Hebrew. We can safely affirm, that there are no living
or

or dead languages which can differ more among each other than the languages of the Mexicans, Otomies, Tarascas, Mayas, and Miztecas, five languages prevailing in different provinces of Mexico. It would therefore be absurd to say, that languages so different were different dialects of one original. How is it possible a nation should alter its primitive language to such a degree, or multiply its dialects so variously, that there should not be, even after many centuries, if not some words common to all, at least an affinity between them, or some traces left of their origin?

Who can ever believe what we read in the history of Acoſta? That the Aztecas, or Mexicans, having arrived after their long peregrination in the kingdom of Michuacan, were allured by the agreeableness of the country, and became desirous of establishing themselves in it; but as the whole nation could not settle there, their god Huitzilopochtli consented that some of them might stay, and suggested to the others, when those who were to remain went to bathe in the lake of Pazcuaro, to steal their clothes from them and pursue their journey; that those who bathed finding themselves robbed of their garments and fooled by their companions, were so provoked, that they not only resolved to remain there, but to adopt a new language; and that thence arose the Tarasca language. The account adopted by Gomara, and other historians, is still more incredible: that, of an old man called *Iztac Mixcoatl* and his wife *Itancueitl* were born six children, each with a different language, called *Xolhua*, *Tenoch*, *Olmecatl*, *Xicallancatl*, *Mixtecatl*, and *Otomitl*, who were the founders of as many nations, which peopled the country of Anahuac. This allegory by which the Mexicans signified that all those nations
drew

drew their origin from one common stock, was made a fable of by the above mentioned authors, from ignorance of its meaning.

II. The Americans do not derive their origin from any people now existing in the ancient world, or at least there are no grounds to affirm it. This inference is founded on the same argument with the preceding, since if the Americans descended of any of those people, it would be possible to trace their origin by some marks in their languages in spite of the antiquity of their separation: but any such traces have not been discovered hitherto, although many authors have searched with the utmost attention, as appears from the work of the Dominican Garcia. We have leisurely compared the Mexican and other American languages with many others which are now living, and with those which are dead, but have not been able to discover the least affinity between any of them. The resemblance between the *Teotl* of the Mexicans and the *Theos* of the Greeks, has induced us sometimes to compare those two languages, but we have never found any agreement between them. This argument is strong in respect to the Americans, as they shew great firmness and constancy in retaining their languages. The Mexicans preserve their language among the Spaniards, and the Otomies retain their difficult dialect among Spaniards and Mexicans, after two centuries and a half of communication with both.

If the Americans descended from different families dispersed after the confusion of tongues, as we believe, and have been separated since then from those others who peopled the countries of the old continent, authors will labour in vain, to seek in the language or customs of the Asiatics for the origin of the people of the new world.

SECT.

S E C T. III.

From what part and how the inhabitants and animals passed to America.

THIS is the second and most difficult point in the problem of the population of America, on which, as on others, authors are various in opinion. Some of them attribute the population of the new world to certain Phœnician merchants, who, in traversing the ocean, landed there by accident. Others imagine that the same people, whom they suppose to have passed from the old continent to the isle Atlantida, from thence got easily to Florida, and from that great country gradually scattered themselves over America. Others believe that they passed there from Asia, by the Straits of Anian; and others, that they were transported there from the northern regions of Europe, over some arm of the frozen sea.

Feijoo, a Spanish Benedictine, thought a few years ago to propose to the world a new system; and what is this new system? That America was united in the north to the old continent, by which both men and animals passed there. But this opinion is as ancient as Acosta, who, one hundred and forty-four years before Feijoo, published it in his History of America: besides, it is not sufficient to solve all the difficulties respecting the passage of animals, as we shall see hereafter.

The count de Buffon, notwithstanding his great genius and pointed accuracy, contradicts himself openly in this point. He supposes the two continents united by oriental Tartary, and affirms that by it the first inhabitants

tants passed to America, and also all those animals which have been found common to both continents; such as *buffalos*, called in Mexico *cibolos*, wolves, foxes, martins, deer, and other quadrupeds, which agree with cold climes; but that there could not be in America either lions, tygers, camels, elephants, or any of those eighteen species of apes which are found in the old continent; and, in short, no quadruped peculiar to hot climes could be common to both continents, because they were not able to resist the cold of northern countries, by which they must pass from one to the other world. This he repeats incessantly through all his natural history, and on this account he denies antelopes, goats, and rabbits to America. He thinks those quadrupeds American only which live in the hot countries of the new world, among which he numbers thirteen or fourteen species of American apes, divided by him into the two classes of *Sapayus* and *Sagoini*; of those, he adds, there were none in the old continent, as there were none of the eighteen species of the old continent in the new world. What then was the origin of those and other quadrupeds really American? This doubt, which occurs frequently in the natural history of that great philosopher, remains undecided until the last volume but one of the history of quadrupeds, in which he says (*d*), “As it cannot be doubted that all animals in general were created in the old continent, we must admit them to have passed from it to the new; and must suppose also, that those animals, the deer, wildgoat, and *mouffettes*, instead of having degenerated like others in the new world, have on the contrary arrived at perfection there, and from the suitableness
“ of

(*d*) Hist. Nat. tom. xxix. Discourse on the Degeneration of Animals.

“ of the clime excelled their own nature. There hav-
 “ ing been so many animals found in the new world,
 “ which have no likenesses to any of the old world, shews
 “ sufficiently clear, that the origin of those animals
 “ which are proper to the new world ought not to be
 “ ascribed to simple degeneration. However great and
 “ powerful we may suppose its effects, we cannot rea-
 “ sonably be persuaded that these animals have been ori-
 “ ginally the same as those of the old continent; and
 “ unquestionably it is more consistent with reason to be-
 “ lieve, that the two continents were formerly contigu-
 “ ous and united, and that those species which retired
 “ into the regions of the new world, because they found
 “ its climate and productions more agreeable to their
 “ nature, were there shut up and separated from the
 “ others, by the irruptions of the sea which divided A-
 “ frica from America (e),” &c. &c. From this dis-
 course of count de Buffon we conclude, 1. That there
 is no animal properly American; because all of them
 went from the old continent, where they were created.
 2. That the argument founded on the nature of the ani-
 mals repugnant to cold, is of no weight to shew that the
 animals could not pass to the old continent; because
 those animals which could not pass by the northern
 countries from their nature, could pass by that part

VOL. III.

P

where

(e) We request our readers to compare what the count de Buffon says concerning the ancient union of Africa and America, with that which he writes in the eighteenth volume, where he speaks of the lion. “ The American lion,” he says, “ cannot be descended from the lion of the old continent, because the latter only inhabits between the tropics; and nature having, it appears, shut up all the passages by the north, it could not pass from the southern parts of Asia and Africa into America, as these two continents are separated by immense seas; on which account we ought to infer, that the American lion is an animal proper and peculiar to the new world.”

where America and Africa were formerly united, as that author believes. 3. That by the way in which the Sapyus and Sagoini passed to the new world, in like manner could elephants, camels, lions, tygers, &c.

Omitting many other opinions unworthy of mention, we shall submit our own; not with a view to establish any new system, but to offer materials for other abler pens, and to illustrate some points of our history.

I. The men and animals of America passed there from the old continent. This is confirmed by the sacred writings. Moses, who declares Noah the common stock of all men after the deluge, says expressly, that in that general inundation of the earth all its quadrupeds, birds, and reptiles, perished, except a few individuals which were saved in the ark, to generate their species. The repeated expressions which the sacred historian uses to signify its universality, do not permit us to doubt, that all quadrupeds, birds, and reptiles, which are in the world, descended from those few individuals which were saved from the general inundation.

II. The first peoplers of America might pass there in vessels by sea, or travel by land, or by ice. 1. They might either pass there in vessels designedly, if the arm of the sea which separated the one continent from the other was small; or be accidentally carried upon it by winds. There is not a doubt that the first peoplers of the new world might arrive there in the same manner in which, many centuries after, the pilot or mariner did to whom, in the opinion of many authors, Columbus owed the first hints which incited him to his glorious and memorable discovery (*f*). 2. They might pass there by land

(*f*) Some authors affirm, that the mariner who gave intelligence to Columbus of the new countries in the west, was a native of Andalusia; some say he

land on the supposition of the union of the two continents. 3. They might also make that passage over the ice of some frozen arm of the sea. No person is ignorant how vast and durable the frozen parts of the northern seas are : it would not therefore be wonderful, that a strait of the sea between the two continents should have been frozen for some months, and that men had passed over it, either in search of new countries or in pursuit of wild beasts. We are, however, only mentioning what could have happened, not what positively did happen.

III. The ancestors of the nations which peopled the country of Anahauc, of which alone we are treating, might pass from the northern countries of Europe into the northern parts of America, or rather from the most eastern parts of Asia to the most westerly part of America. This conclusion is founded on the constant and general tradition of those nations, which unanimously say that their ancestors came into Anahuac from the countries of the north and north-west. This tradition is confirmed by the remains of many ancient edifices built by those people in their migrations, which we have already mentioned, and the common belief of the people in the north. Besides, from Torquemada and Betancourt we have a clear proof of it. In a journey made by the Spaniards, in the year 1606, from New Mexico unto the river which they call *Tizon*, six hundred miles from that province, towards the north-west, they found there some large edifices and met with some Indians who spoke the Mexican language, from whom they were told, that
a few

was of Biscay, and others that he was a Portuguese; others deny the fact entirely. However the case was, it is certain that history records many instances of vessels having been driven by winds and carried many degrees out of their course.

a few days journey from that river towards the north was the kingdom of Tollan, and many other peopled places, from whence came those who peopled the Mexican empire; and that by the same peoplers these and other like buildings had been erected. In fact, the whole people of Anahuac have usually affirmed, that towards the north-west and the north, there were the kingdoms and provinces of Tollan, Teocolhuacan, Amaquemecan, Aztlan, Tehuajo, and Copalla, names which are all Mexican, and the discovery of which, if the population of the Spaniards should spread into those parts, will throw great light on the ancient history of Mexico. Boturini says, that in the ancient paintings of the Toltecas, was represented the migration of their ancestors through Asia and the northern countries of America, until they established themselves in the country of Tollan, and even endeavours to ascertain in his General History the route they pursued in their travel; but as he had not opportunity to compose the history which he designed, we can say no more of this matter.

Those countries in which the ancestors of those nations established themselves, being situated towards that part where the most westerly coast of America approaches to the most easterly part of Asia, it is probable that by that part they passed from the one to the other continent; either in vessels, if the strait of the sea then divided them which is there at present, according to the discoveries of the Russians, or by land, if the continents were united, as we shall presently find. The traces which those nations left of themselves from time to time, lead us to that very strait which is undoubtedly the same which was discovered by the navigators of the sixteenth

teenth century, and called by them the *Straits of Anian* (g).

With respect to the other nations of America, as there is no tradition among them concerning the way by which their ancestors came to the new world, we can say nothing of them. It is possible, that they all passed by the same way in which the ancestors of the Mexicans passed; and yet perhaps they may have passed by some other very different route. We conjecture, that the ancestors of the nations which peopled South America went there by the way in which the animals proper to hot countries passed, and that the ancestors of those nations inhabiting all the countries which lie between Florida and the most northern part of America, passed there from the north of Europe. The difference of character which is discoverable in the three above mentioned classes of Americans, and the situation of the countries which they occupied, make us suspect that they had different origins, and that their ancestors came there by different routes; but still this is a mere suspicion and conjecture.

Some authors assign another part for the passage of the first peoplers, which is the island Atlantida; the existence of which, contradicted by Acosta, was maintained by Siguenza, by what appears from the account of Gemelli, and lately supported with great shew of erudition by the celebrated author of the American Letters. If there were not so many fables mixed with the account of that island which Plato gives in Timeus, the authority of so grave a philosopher might induce us to assent

(g) In the charts of America published in the last century, the strait of Anian was usually described, though with much difference in the representation of it. For some years past it has been omitted, from an opinion that the account of it was fabulous; but since the discovery of the Russians some geographers have begun again to give it a place.

assent to his opinion. We shall therefore, omit this contest, and come to the most difficult point of our problem.

IV. The quadrupeds and reptiles of the new world passed there by land. This fact will be made most manifest, by demonstrating the improbability and inconsistency of other opinions. The great doctor of the church Augustin, was of opinion, that the wild beasts and destructive animals which are in the islands might have been transported there by the angels. But this solution, although it cuts off every difficulty in the passage of wild beasts to the new world, would not be acceptable in the century in which we live.

The same doctor suggests three other solutions to the difficulty: the wild beasts, he says, might pass by swimming to the isles; they might be transported there by men for the sake of hunting; and they might also have been formed there by nature as they were in the beginning. But none of these solutions are sufficient to remove the difficulties which are in the way of the passage of the wild beasts to the new world; for as to the first, it is certain that whatever strait there was between the two continents, it is quite ridiculous to think that animals which are not destined to go into the water, or accustomed to swimming, would attempt such a passage: it is true, that some might have passed by swimming, as the bears go from Corsica to France; but who would believe this of so many American apes, that are totally unfitted for swimming; or the *Perico ligero*, or sloth, which is so slow and difficult to move? Besides, what could induce so many wild animals to abandon the land and encounter the dangers of the sea?

It

It is not less incredible, that those animals were transported there by men in ships, especially if we suppose their arrival on the coasts of America to have been accidental and fortuitous. If such voyage was undertaken from design, they might have carried some squirrels and curious apes with them for amusement, some rabbits, hares and *techichis*, that, after multiplying, they might serve for food, and some deer, martins, and even tygers, for their skins to clothe them; but to what purpose carry wolves, foxes, American lions, &c. which, instead of being of any use, might prove destructive to them? For the chase? But might they not have enjoyed this recreation without any injury from animals less ferocious? And if, lastly, we suppose those first peoplers so foolish as to carry such pernicious animals to new countries to hunt them, we cannot still think them to have been so mad as to take also so many species of serpents, for the pleasure of killing them afterwards.

With respect to the third solution, that God had created the animals in America, as he had created them in Asia, that would unquestionably cut off every difficulty, were it not contradictory to sacred history.

There remains another solution of the passage of beasts, which is the same that we mentioned in treating of men. It may be imagined, that beasts might pass over some frozen strait of the sea; but can any person persuade himself, that several species of voracious animals should transport themselves to those regions destitute of every thing which could serve for their food; and that others, whose natures were repugnant to cold, should dare to venture, in the rigor of winter, over regions of ice?

As

As it is not probable that the beasts of the new world passed to it by swimming, or over ice, nor that they were transported either by men or by angels, nor created afresh by God, we ought to believe that the quadrupeds, as well as the reptiles which are found in America, passed to it by land, and of course that the two continents were formerly united. This is the opinion of Acoſta, Grotius, Buffon, and other great men. We are far from adopting the system of count de Buffon in its full extent: he cannot persuade us, however eloquent his philosophy and great his learning, that that which is now land has once been the bed of the sea; or, that the old continent has been subject to a general inundation distinct from that of Noah, and more lasting than it. In the series of forty centuries and upwards, comprehended in the history of the sacred writings, there is no chasm or void by which we could account for this supposed inundation. In our third Dissertation we shall shew there are no grounds to believe that the new continent has suffered any inundation different from that of Noah.

There is not a doubt, however, that our planet has been subject to great vicissitudes since the deluge; ancient and modern histories confirm the truth which Ovid has sung in the name of Pythagoras:—

*Vidi ego quod fuerat quondam solidissima tellus,
Esse fretum; vidi factas ex aquore terras.*

At present they plough those lands over which ships formerly sailed, and now they sail over lands which were formerly ploughed: earthquakes have swallowed some lands, and subterraneous fires have thrown up others: the rivers have formed new soil with their mud: the sea retreating

retreating from the shores, has lengthened the land in some places; and advancing in others, has diminished it: it has separated some territories which were formerly united, and formed new straits and gulfs. We have examples of all these revolutions in the past century. Sicily was united to the continent of Naples, as Eubœa, now the Black Sea, to Bœotia. Diodorus, Strabo, and other ancient authors, say the same thing of Spain and Africa, and affirm that by a violent irruption of the ocean upon the land between the mountains Abyla and Calpe, that communication was broken, and the Mediterranean sea was formed. Among the people of Ceylon there is a tradition, that a similar irruption of the sea separated their island from the peninsula of India. The same thing is believed by those of Malabar, with respect to the isles of Malvidia, and by the Malayans with respect to Sumatra. It is certain, says the count de Buffon, that in Ceylon the earth has lost thirty or forty leagues, which the sea has taken from it; on the contrary, Tongres, a place of the Low Countries, has gained thirty leagues of land from the sea. The northern part of Egypt owes its existence to inundations of the Nile (*b*). The earth which this river has brought from the inland countries of Africa, and deposited in its inundations, has formed a soil of more than twenty-five cubits of depth. In like

VOL. III.

Q

(*b*) Faro or Farion, an island of Egypt, which, according to what Homer mentions in his *Odyssey*, was distant one day and one night's sail from the northern land of Egypt, was so near to it in the times of the celebrated Cleopatra, that it was hardly seven furlongs off: for so much was the length of the bridge which that queen ordered to be made for the Rhodians, in order to facilitate the communication between that island and the continent. Herodotus, Aristotle, Seneca, Pliny, and other ancient authors, make mention of this remarkable augmentation of the territory of Egypt.

like manner, adds the above author, the province of the Yellow River in China, and that of Louisiana, have only been formed of the mud of rivers. Pliny, Seneca, Diodorus, and Strabo, report innumerable examples of similar revolutions, which we omit, that our Dissertation may not become too prolix; as also many modern revolutions, which are related in the theory of the earth of the count de Buffon and other authors. In our America, all those who have observed with philosophic eyes the peninsula of Yucatan, do not doubt that that country has once been the bed of the sea; and on the contrary, in the channel of Bahama many indications shew the island of Cuba to have been once united to the continent of Florida. In the strait which separates America from Asia many islands are found, which probably were the mountains belonging to that tract of land which we suppose to have been swallowed up by earthquakes; which is made more probable by the multitude of volcanos which we know of in the peninsula of Kamtschatka. We imagine, however, that the sinking of that land, and the separation of the two continents, has been occasioned by those great and extraordinary earthquakes mentioned in the histories of the Americans, which formed an æra almost as memorable as that of the deluge. The histories of the Toltecas fix such earthquakes in the year 1 Tecpatl; but, as we know not to what century that belonged, we can form no conjecture of the time that great calamity happened. If a great earthquake should overwhelm the isthmus of Suez, and there should be at the same time as great a scarcity of historians as there were in the first ages after the deluge, it would be doubted in three or four hundred years after, whether Asia had ever been united by that part to Africa, and many would firmly deny it.

V. The quadrupeds and reptiles of America passed by different places from the one continent to the other. Amongst the American beasts, there are some whose natures are averse to cold ; such as apes, dantes, crocodiles, &c. There are others, whose dispositions lead them to cold countries, as martens, rein-deer, and gluttons. The former could not go to America by the frigid zone, because in that case they would be acting violently against their genius, and would not survive the passage.

The apes which are in New Spain passed there certainly by South America (*i*). The centre of their population is the country under the equator, and between it and the fourteenth or fifteenth degree of latitude ; in proportion to the distance from the equator their numbers decrease, and beyond the tropics there are none to be found, except in some districts which from some particularity of situation are as hot as the equinoctial lands. Who, therefore, can imagine that such species of animals should have travelled to the new world through the rigid climate of the north ? It may be said, that it is not improbable that they were transported by men, as they were valued for their extravagant resemblance and ridiculous imitations of men. But besides that, the argument which this forms in regard to apes, may be adduced with respect to many other quadrupeds which have no value to make them be coveted, but rather many bad qualities to make them be avoided ; it is not to be believed, that men would have conducted with them
so

(*i*) Don Ferdinand d'Alba Ixtlilxochitl, an Indian well informed in the antiquities of his nation, says in his Universal History of New Spain, that there were no apes in the country of Anahuac ; that the first which appeared there came from the quarter of the South, after the period of the great winds. The Tlascalans make a fable of this event, and say, that the world was destroyed once by wind, and that the few men who survived were transformed into apes.

so many species of apes as there are in America ; and far less some, which instead of being agreeable, are on the contrary of a brutal aspect and ferocious disposition, namely, those called *zambos* ; and, provided men had been determined to have taken two individuals at least of every species, they could never arrive either by the seas or the countries of the north, although their conductors had endeavoured to defend them from the cold. They must, therefore, have transported them from the hot countries of the old continent to the warm countries of the new world, over a sea subject to a climate not dissimilar to that of the native country of those quadrupeds, that is by the countries of the south of Asia to the south of America, over the Indian and Pacific Oceans, or from the western countries of Africa to the eastern countries of America, over the Atlantic Ocean. If men, therefore, transported those beasts from the one to the other world, they did it across those seas. But was this navigation casual or designed ? If casual, how and wherefore did they conduct so many animals with them ? If it was designed, and with a determined purpose to pass from the one to the other world, who gave them intelligence of it ? Who shewed them the situation of those countries ? Who pointed out their course ? How did they venture to cross such vast seas without the compass ? In what vessels ? If they landed there happily, why does there not remain among the Mexicans some memory of their construction ?

Besides, in the torrid zone of the new world crocodiles are common, animals which require a hot or temperate climate, and live alternately on land or in sweet water ; how did such animals pass there ? Not by the north, certainly ; because their nature is strongly averse to cold :
neither

neither were they transported by men, we may safely say ; as little can we think, by swimming two thousand miles through the salt waters of the Ocean.

There remains no other solution, but that of admitting an ancient union between the equinoctial countries of America and those of Africa, and the continuation of the northern countries of America with those of Europe or Asia; the latter for the passage of beasts of cold climes, the former for the passage of quadrupeds and reptiles peculiar to hot climes. For the reasons we have already submitted, we are persuaded, that there was formerly a great tract of land which united the now most eastern part of Brazil to the most western part of Africa; and that all that space of land may have been sunk by some violent earthquakes, leaving only some traces of it in the isles of Cape de Verd, Fernando de Norona, Ascension, St. Matthew, and others; and many sand-banks discovered by different navigators, and in particular by de Bauche, who sounded that sea with great care and exactness (k). Those islands and sand-banks may probably have been the highest parts of that sunken continent. In like manner we believe that the most westerly part of America was formerly united by means of a smaller continent to the most easterly part of Tartary, and perhaps America was united also by Greenland with other northern countries of Europe.

Upon the whole, from all we have said, we cannot but believe that the quadrupeds and the reptiles of the new world passed there by land, and by different parts,
to

(k) M. de Bauche, in the year 1737, presented to the Royal Academy of Sciences of Paris the hydrographical charts of that sea, made according to his observation; which were examined and approved of by the Academy. The celebrated author of the *American Letters* has inserted a draft of those charts in the second volume of his work.

to that continent. All other systems are subject to heavy difficulties; even this is not without some, but they are not altogether insurmountable. The greatest consists in the apparent improbability of an earthquake so great as to sink a space of land of more than one thousand five hundred miles, which, according to our supposition, was that which united Africa to America, and sunk it so much as to the depth observed in some of the places of that sea. But we do not ascribe that stupendous revolution to one single shock, as there are in the bowels of the earth such extensive masses of combustible matter, the inflammation of one could easily communicate to others, (in the same manner as Gassendus explains the propagation of lightning) and the violent concussion of the air, contained within those natural mines, could at once shake, agitate, and overwhelm a space of land of two or three thousand miles. This is not impossible, nor improbable, nor is history unfurnished with examples of it. The earthquake which was felt in Canada, in the year 1663, overwhelmed a chain of mountains of freestone more than three hundred miles long, the whole of that immense tract remaining changed into a plain. How great then must the convulsion have been which was occasioned by those extraordinary and memorable earthquakes, mentioned in the histories of America, when the world was thought to have been coming to an end!

It may be objected to our system, that if beasts passed by land from the one continent to the other, it is not easy to divine the cause why some species passed there without leaving a single individual in the old continent; and, on the contrary, that some entire species should remain in the old continent, and not a single individual of them pass to America. Why, for example,
did

did the fourteen species of apes, which are now in America, pass there, and not the eighteen species which count Buffon enumerates in Asia and Africa, although they are all of one clime, and were equally at liberty and freedom to pass? How came the sloths to pass, which are so sluggish, and not the antelopes which are so swift? If the beasts proceeded from Armenia towards America, the species destined for America must necessarily have performed a journey of six thousand miles, spreading from Armenia through Mesopotamia and Syria to Egypt, from thence through the centre of Africa to the supposed space of land which formerly united the two continents, and from that, lastly, to Brazil; and although to other beasts there appears no difficulty of their having made that progress in ten, twenty, or forty years, nevertheless with respect to the sloths, it is not to be comprehended how they could, even in constant motion, execute this in less than six centuries. If we give credit to the count de Buffon, the sloths cannot advance more than a perch in an hour, or six Parisian feet, wherefore, to make a progress of six thousand miles, they would require about six hundred and eighty years and more, if we believe what Maffei, Herrera, and Pison have written, who affirm, that that miserable quadruped can hardly go the length of a stonethrow in fifteen days or a fortnight.

This is what may be objected to our system, but some of the above mentioned arguments are more forcible against all the other opinions, except the one which employs the angels in the transportation of beasts. If they were men who transported beasts, why, instead of wolves and foxes, did they not carry horses, oxen, sheep, and goats? And why did they not leave a species of each individual in the old continent? If such animals are
supposed

supposed to have passed by swimming, then the difficulty of the sea passage to land animals comes in the way. If all the animals are supposed to have passed, even those of South America by the north, then, instead of making a journey of six thousand miles, they must have made one of more than fifteen thousand, for which length of way their sloth would have had occasion for more than one thousand seven hundred and forty years.

We answer then to the above objections, 1. That as all the quadrupeds of the earth are not yet known, we cannot say how many are in the one or in the other continent. The count de Buffon numbers only two hundred species of quadrupeds. Bomare, who wrote a little after that author, makes them two hundred and sixty-five: but to say how many more there may be, until we have examined the inland regions of Africa, of a great part of Tartary, the country of the Amazons, North Louisiana, the countries beyond the river *Colorado*, the country of the Apaches, the Salomon isles, New Holland, &c. which countries make a considerable part of our globe. It is not wonderful that the animals of these unknown countries are still strangers to us, when those of countries which have been known, and inhabited for these two hundred and sixty years by the Europeans, are yet unnoticed by zoologists. The count de Buffon, although he is the most informed on this subject, omits some quadrupeds of Mexico, places many out of their native country, and confounds others together, as we shall shew in our Dissertation on animals. But with respect to the animals which are certainly not original in America, such as camels, elephants, and horses, several reasons may be assigned for this want. Possibly those animals did pass to the new world, but were destroyed by other wild beasts, or extirpated by
some

some distemper. Perhaps they never did pass there. Some, such as elephants and rhinoceroses, the multiplication of which is slow, stopped in the southern parts of Asia and Africa, because they found a climate agreeable and suitable to their natures, and had not occasion therefore to go further for pastures or food. It is true, that many authors are persuaded that the great bones dug up near the river Ohio, and other places of America, have belonged to elephants, which would argue their ancient existence in that continent; but as modern zoologists are not agreed with respect to the species of quadruped to which such bones may have belonged, no argument from them can be deduced against us (*1*). Lastly, other beasts did not pass to the new world, perhaps because men detained them. But however the matter may be, the passage of some beasts and not of others proves nothing against our system.

With respect to the calculation above mentioned, of what time the sloth would require to move from America to Brazil, it raises no inconvenience; for if it had occasion for more than a thousand years, on the supposition we made of the union of the two continents continuing all that time, it might arrive there at last. The count de Buffon declares, that authors have exaggerated the slowness of the sloth; and Mr. Aubenton acknowledges, that it was not so slow as the turtle. Besides, it being a harmless animal, it may have been transported by men.

VOL. III.

R

DISSERTATION

(*1*) Muller said, that those bones belonged to certain large quadrupeds, which he called *Mammouts*. The count de Buffon, trusting too much to him, computed that those quadrupeds were seven times larger than elephants. Some have believed that those bones belonged to the sea-horses, some to other sea-animals; and, lastly, some have thought they belonged to some unknown quadrupeds that are now extinct: but they may, from what appears, have belonged to giants of the human as well as of any other race.

DISSERTATION II.

On the Principal Epochs of the History of Mexico.

THE different opinions of authors concerning the chronology of the history of Mexico, oblige us to examine with attention the epochs of the principal events. If we had done this in the body of our history, it would have interrupted the narration with unseasonable disputes. The variety of sentiments among writers on this head, arises from their not having adjusted the Mexican years with ours. We have laboured with great diligence to investigate the truth, and we think we have in great part succeeded, as we shall endeavour to shew in the present dissertation, which will, however, prove little interesting to those who have no taste for, or curiosity in, points of chronology.

S E C T. I.

On the Epoch of the Arrival of the Toltecas, and other Nations in the Country of Anahuac.

WE do not treat now of the first peoplers, but only of those nations who make a conspicuous figure in our history. Authors in the first place disagree about the order of the arrival of such nations; as the Chechemecas for example, who, according to Acofta, Gomara, and Siguenza, were the first to arrive in that country, and, according to Torquemada, the third, were the fourth, if we believe Boturini. Nor are they less discordant about the arrival of every other nation.

None

None of them doubt that the Toltecan nation was very ancient. It appears from the histories of the Chechemecas, that they did not arrive in Anahuac until after the ruin of the Toltecas, whose buildings they met with in their travels, and remains of whom they found on the banks of the Mexican lakes, and other places. In this point Torquemada, Betancourt, and Boturini are agreed. Acofta and Gomara make no mention of the Toltecas, because perhaps those authors whom they consulted omitted to speak of them, as their knowledge of them was but little and obscure.

With respect to the time of their arrival in Anahuac, Torquemada says, in book III. of his history, that it happened in the year 700 of the vulgar era; but from what he writes in book I. it appears to have happened in 648. Boturini makes them one century more ancient, as he believed that in 660 Ixtlalcuechahuac, the second king of that nation, was reigning in Tula. From their pictures we know, that they left Huehuetlapallan in the year I Tecpatl; that, after having travelled one hundred and four years, they settled in Tollantzinco, and then in Tula; and that their monarchy commencing in the year VII Acatl lasted three hundred and eighty-four years. After comparing these epochs of the Toltecas with those of the Chechemecas, their successors, we are persuaded that the departure of the former from Huehuetlapallan happened in 544, and that their monarchy began in the year 667. Whoever will trace back towards that time, the series of Mexican years contrasted with Christian years, set forth at the end of our first volume, will find the year 544 of the vulgar era to have been I Tecpatl, and the year 667 to have in like manner been VII Acatl. There is no reason to anticipate these epochs, nor can they be postponed without confounding

founding those of other later nations. That monarchy having begun then in 667, and lasted three hundred and eighty-four years, the end of it, and ruin of the Toltecas, ought to be fixed in the year 1051.

Between the ruin of the Toltecas and the arrival of the Chechemecas, Torquemada allows but nine years; this interval is too small, because the Chechemecas found, as the same author says, the edifices of the Toltecas in ruins; and it is improbable that they would have gone to ruin in only nine years. Besides, we cannot fix the beginning of the Chechemecan monarchy in that century, without increasing the number of their kings, or prolonging their lives immoderately, as Torquemada has done. Who can believe that Xolotl reigned a hundred and thirteen years, and lived two hundred? That Nopaltzin his son lived one hundred and seventy; that Techtolala, his great great grandson should reign one hundred and four; and Tezozomoc, his descendant, should reign in Azcapozalco one hundred and sixty, or one hundred and eighty years? It is true, that a man of robust constitution, assisted by sobriety of life, and so mild a clime as that of Mexico, might arrive at so advanced an age; and in that country there are not a very few examples of men who have prolonged their life beyond the regular time prescribed to mortals. Calmecahua, one of the Tlascalan captains who assisted the Spaniards in the conquest of Mexico, lived one hundred and thirty years. Pedro Nieto, a jesuit, died in the year 1536, at the age of one hundred and thirty-two years. Diego Ordoñez, a Franciscan, died in Sombrerete aged one hundred and seventeen (*m*), making
preachings

(*m*) Diego Ordonez lived in religion one hundred and four years, and in the priesthood almost ninety-five. In his last preaching he took leave of the people

preachings to the people until the last month of his life. We could make a long catalogue of those who in the two centuries past have exceeded one hundred years of life in these countries. Particularly among the Indians there are not a few who reach ninety and one hundred years, preserving to old age their hair black, their teeth firm, and their countenance fresh; but as there have been so very few who since the twenty-third century of the world have prolonged their lives to one hundred and fifty years, that they are regarded as prodigies, we cannot assent to the extravagant chronology of Torquemada, supported only perhaps on the evidence of some painting or history of the Tezcucans, and particularly as that author himself confesses that that nation kept no account of years. We believe, however, without hesitation, that the arrival of the Chechemecas in Anahuac happened in the twelfth century, and probably towards the year 1170.

Eight years had scarcely elapsed after Xolotl, the first Chechemecan king, was established in Tenajuca, when new people arrived there, conducted, as we have already said, by six chiefs. We do not doubt that these new people were the six tribes of the Xochimilcas, Tepanecas, Colhuas, Chalchese, Tlahuicas, and Tlascalans, separated from the Mexicans in Chicomoztoc, and arrived in the vale of Mexico not all at once, but in the order and distance of time we have mentioned. It is certain that when the Acolhuas arrived a few years after, they found the city of Azcapozalco already founded by the Tepanecas, and Colhuacan by the Colhuas. It is known besides,

ple of Sombrerete with those words of St. Paul: "Bonum certamen certavi,
" cursum consummavi, &c."

sides, that these tribes came to that country after the Chechemecas, as their arrival happened in that interval between the arrival of the Chechemecas and that of the Acolhuas.

There is no memory of any other people who came into Anahuac about that time, except those tribes conducted by the above mentioned chiefs. Acofta makes these tribes almost three centuries more ancient, as he says they arrived on the banks of the Mexican lake in the year 902, after a peregrination of eighty years; but this chronology does not accord well with history, from which it appears that when Xolotl arrived at the vale of Mexico with his colony of Chechemecas, he found the banks of that lake depopulated, and the arrival of this colony could not happen before the middle of the twelfth century, according to what we have said.

The year of the arrival of the Acolhuas is not known; but we do not doubt that it has been towards the end of the twelfth century, because they came a few years after the arrival of those six tribes; and besides, it is evident from history itself, that Xolotl survived their arrival some years.

The last nation, or tribe, which arrived at Anahuac was that of the Mexicans. Among so many historians consulted by us, we have not found one of a contrary opinion except Betancourt, who makes the Otomies come after them.

Acofta fixes the arrival of the Mexicans on the banks of the Mexican lake in the year 1208, because he affirms that they arrived there three hundred and six years after the Xochimilcas, and other tribes of the Nahuatlacas, who he believes arrived in 902. Torquemada, according to the calculation made by Betancourt
founded

founded on his account, dates the arrival of the Mexicans in Chapoltepec in the year 1269. An anonymous Mexican History cited by Cav. Boturini, fixes the arrival of that tribe in Tula in the year 1196, and upon that epoch it appears that several Indian historians are agreed. Besides, this chronology agrees perfectly with all the other epochs; on which account we have adopted it as the most probable, and almost certain. On this supposition it is necessary to say, that the Mexicans arrived at Tzompanco in the year 1216, and at Chapoltepec in 1245; because it is known that they stayed at Tepexic in Tula nine years, and in other places, before they arrived at Tzompanco, eleven years. In Tzompanco they sojourned seven years, and in other places, before they arrived at Chapoltepec, twenty-two years. After having been eighteen years in Chapoltepec, they passed to Acolco, in 1262, where they remained fifty-two years, and from thence they were conducted slaves to Colhuacan in 1314.

With respect to the Otomies there is a great difference of opinion among authors: some confound them with the Chechemecas, namely Acosta, Gomara, and the greater part of the Spanish authors. Torquemada, in book I. distinguishes them expressly, but in other places he confounds them together. Betancourt, after having copied the relation of Torquemada, in every thing relative to the Toltecas, the Chechemecas, and other nations, speaking of the reign of Chimalpopoca, third king of Mexico, says, that in his time the Otomies arrived in Anahuac, and established themselves principally in Xaltocan. This anecdote from Betancourt is deserving of notice; for he undoubtedly took it from the writings of Siguenza, although he does not usually depart from Torquemada,

quemada, unless it is to follow that learned Mexican; but he errs in chronology when he fixes the arrival of the Otomies in the year VI Tecpatl, which he believes to have been the year 1281. He is certainly deceived, for as it appears from the chronological table put at the end of our first volume, the year 1381 was not VI Tecpatl, but VI Calli; neither was Chimalpopoca reigning at that time, but Acamapitzin, as we shall shortly shew. If the arrival of the Otomies in the Mexican vale (not in the country of Anahuac, where they were settled many years before) happened in the year VI Tecpatl, and under the reign of Chimalpopoca, that must certainly have been in the year 1420. There being no mention of the Otomies before this epoch, and they having been found less civilized than other nations, scattered about in several provinces, and in places surrounded by other nations of different languages, inclines us to believe, that they began to live in society under the dominion of the Tepanecas exactly at that time, and afterwards under that of the Mexicans and Tlascalans. We are persuaded that on account of having found the land occupied by other nations, they could not, like the others, establish themselves all in one country, although the greater part of that nation peopled that part of land which is to the north-west, and north of the capital, where at first they lived scattered about like the wild beasts.

The cause of the Otomies having been confounded with the Chechemecas by many historians, may be gathered from the same history. At the time the ancient Chechemecas were rendered civilized by the Toltecas and Nahuatlacas, many families of that nation abandoned themselves to a savage life in the country of the Otomies, choosing the exercise of the chase rather than the

the fatigues of agriculture. They retained the name of Chechemecas, and the others who were brought to civilization began to be called *Acolhuas*, honouring themselves with the name of a nation which was esteemed the most polished. Of the Otomies, those who adopted a civil life retained the name of Otomies, by which they are known in history; but the others, who were spread in the woods, and mingled with the Chechemecas, would never give up their barbarous liberty, and were by many called Chechemecas, from the name of that celebrated nation; on which account some writers, treating of those barbarians, who for more than a century after the conquest, harassed the Spaniards, distinguish the Mexican Chechemecas from the Chechemecas of the Otomies; for the one spoke the Mexican language, and the others that of the Otomies, according to the nation whence they drew their origin.

From all that we have hitherto said, we may conclude with the greatest probability possible in so obscure a subject, that the order and time of the arrival of those nations in the country of Anahuac was as follows:

The Toltecas, in the year 648.

The Chechemecas, about the year 1170.

The first Nahuatlacas, about 1178.

The Acolhuas, toward the end of the twelfth century.

The Mexicans arrived at Tula in the year 1196, at Tzompanco in the year 1216, and at Chapoltepec in the year 1245.

The Otomies entered the vale of Mexico, and began to form into societies in the year 1220.

We know well that the Tepanecas boasted of their city of Azcapozalco being so old, that according to Torquemada they counted one thousand five hundred and

sixty-one years from the foundation of it to the beginning of the last century: so that they imagined it to have been founded immediately after the death of our Saviour; but the error of this opinion appears manifest, from the histories of other nations, which make the Tepanecas little more ancient in Anahuac than the Mexicans, and also from the series itself of the chiefs of Azcapozalco, whose portraits were preserved unto our time in an ancient edifice of that city. They did not count more than ten princes from the foundation of their city, unto the memorable destruction of their state, occasioned by the combined arms of the Mexicans and Acolhuas, which happened, as we shall find, in the year 1425: on which account it would be necessary to allow to each of their sovereigns one hundred and forty years of reign to fill up that period.

The Totonacas, on their part, reported themselves more ancient than the Chechemecas; for the boast of antiquity is a weakness common to all nations. They relate, that having been at first, for some time, established on the banks of the Tezcucan lake; from thence they went to people those mountains, which took from them the name of Totonacapan; that there they were governed by ten lords, each of whom governed the nation precisely eighty years, until the Chechemecas having arrived in Anahuac, in the time of the second lord of that nation, named Xatoncan, at length subjected them to their dominion; and that lastly they were the subjects of the kings of Mexico. Torquemada, who relates this account of the Totonacas, in the third book of his Indian Monarchy, adds, that this is certain and confirmed by authentic histories worthy of faith; but whatever he may say, it is certain that the time of the arrival
of

of that nation in Anahuac, neither is nor can be known, and that the story of the ten lords, who governed the nation each precisely eighty years, is only fit to amuse children.

Still less is it known when the Olmecas and Xicallancas arrived. Boturini says, that he could find neither picture nor monument concerning these nations, although he believes them more ancient than the Toltecas; but still it is unquestionable that they were not the most ancient.

We do not here make mention of any other nations, because their antiquity is absolutely unknown; but we do not doubt, considering what we have already explained and set forth, that the Chiapanese were amongst the most ancient, and perhaps the first of all those who peopled the country of Anahuac.

S E C T. II.

Concerning the Correspondence of the Mexican Years with ours, and the Epoch of the Foundation of Mexico.

ALL the Mexican as well as Spanish writers, who have made mention of the Mexican chronology, are agreed respecting the method which those nations had of computing their centuries and their years, explained by us in book VI. of our history, and in the latter part of the end of vol. I. Whenever, therefore, we find the correspondence of any one Mexican year with any one Christian year, the correspondence of all the rest will easily be known. If, for example, we know that the year 1780 was the II Tecpatl, as it really was, we are certain that the year 1781 was the III Calli; the year
1782,

1782, was IV Tochtli, &c. All the difficulty consists in finding a Mexican year the correspondence of which with a Christian year is absolutely certain and indubitable; but we find this difficulty surmounted, by being assured not less from the ancient pictures of the Indians than by the testimony of Acosta, Torquemada, Siguenza, Betancourt, and Boturini, that the year 1519, in which the Spaniards entered into Mexico, was I Acatl, and of consequence that the year 1518 was XIII Tochtli, the year 1517 XII Calli, &c. so that there is no room for doubt of the exactness of our table, put at the end of volume I. respecting the correspondence of Mexican with Christian years. Those authors who disagree with it, have erred in their calculation, and contradicted themselves. Betancourt, in order to make us comprehend the manner which the Mexicans had of computing years, presents us with a table of Mexican years, contrasted with Christian years, from the year 1663 unto 1688, but this table is erroneous from beginning to end; for the author supposes the year 1663 to have been the year I Tochtli, which is demonstrated to be false by the continuation of our table to that year. He affirms that 1519 was a secular year; by the admission of this error, his chronology cannot but be false throughout. If the year 1519 was I Acatl, as he supposes, with other writers, we shall find, by going backwards in our table, that 1507 was not a secular year, but 1506 was. In order to confirm his chronology, he adduces the testimony of his friend and fellow-countryman Siguenza, who, he says, found that the year 1684 had been IX Acatl. If this was the case, his calculation would certainly be right; but although we do not doubt his veracity in the citation of Siguenza, we have reason to believe that this learned Mexican correct-
ed

ed his chronology ; nor could he do otherwise, when he knew that the year 1519 had been I Acatl, a certain foundation and beginning on which all the Mexican chronology ought to rest, and from which it is clearly deducible that the year 1684 had not been IX Acatl, but X Tecpatl. Torquemada, in his third book, treating of the Totonacas, says of a noble of that nation, that he was born in the year II Acatl, and that the year before 1519, in which the Spaniards arrived in that country, was, among the Mexicans, the year I Acatl. When Torquemada wrote this he was either dreaming, or absent in mind ; for he knew well that the year among the Mexicans which comes after I Acatl, is not II Acatl, but II Tecpatl, and such was the year 1520, of which he speaks.

Supposing then that the year 1519 was I Acatl, and that the correspondence of the Mexican with the Christian years is known, it is not very difficult to trace back the epoch of the foundation of Mexico. All historians who have consulted the paintings of the Mexicans, or who have been informed by them by words, agree in saying, that that celebrated city was founded by the Aztecas, in the 14th century ; but they differ a little as to the year. The interpreter of Mendoza's collection fixes the foundation of it in the year 1324. Gemelli, following Siguenza, makes it in 1325. Siguenza, cited by Betancourt and an anonymous Mexican, cited by Boturini, in 1327. Torquemada, according to the calculation made by Betancourt, from his account, in 1341 ; and Arrigo Martinez, in 1357. The Mexicans make the foundation in the year II Calli, as appears from the first painting of the collection of Mendoza and others, cited by Siguenza. It being certain, therefore, that

that

that city was founded in the 14th century, and in the year II Calli, that cannot have been in 1324, nor in the year 1327, or 1341, or 1357, because none of those years was II Calli. If we go back from the year 1519 to the 14th century, we shall find in it two years II Calli: that is 1325, and 1377. But the foundation could not have happened in this last year; for then it would be necessary to shorten very much the reign of the Mexican monarchs, in contradiction to the chronology of the ancient paintings. Nothing remains to be offered therefore but that that celebrated capital was founded in 1325 of the vulgar era: and this was most certainly the opinion of Siguenza; for Gemelli, who had no other instruction on this subject but that which was given him by that learned Mexican, places the foundation of this city in 1325, which he says was the year II Calli. If at first he was of a different opinion, he changed it afterwards on perceiving that it would not have agreed with that fixed principle, namely, that the year I Acatl was certainly the year 1519.

S E C T. III.

On the Chronology of the Mexican Kings.

IT is difficult to illustrate entirely the chronology of the Mexican kings, on account of the disagreement between authors. We will avail ourselves of some certain points, to clear up those which are uncertain. In order to give our readers some idea of the diversity of opinions, it will be sufficient to present the following table, where we mark the year in which, according to Acosta, the Interpreter of Mendoza's collection, and Siguenza, each of the kings began to reign.

Acosta.

| Acosta. | The Interpreter. | | Sigüenza. | |
|---------------|------------------|-----|-----------|-------------------|
| Acamapitzin | 1384 | - - | 1375 | 3 May - 1361 |
| Huitzilihuitl | 1424 | - - | 1396 | 19 April - 1403 |
| Chimalpopoca | 1427 | - - | 1417 | 24 February 1414 |
| Itzcoatl - - | 1437 | - - | 1427 | - - - 1427 |
| Montezuma I. | 1449 | - - | 1440 | 13 August - 1440 |
| Axajacatl - | 1481 | - - | 1469 | 21 November 1468 |
| Tizoc - - | 1487 | - - | 1482 | 30 October - 1481 |
| Ahuitzotl - | 1492 | - - | 1486 | 13 April - 1486 |
| Montezuma II. | 1503 | - - | 1502 | 15 September 1502 |

Acosta, and after him Arrigo Martinez, and Herrera, not only disagree with other authors in chronology, but also in the order of the kings, placing Tizoc on the throne before Axajacatl; whereas the contrary is evident, not less from the testimony of the Mexicans than that of other Spanish authors. Gomara perplexes the reigns of the lords of Tula with those of the kings of Colhuacan and the Mexican kings. Torquemada points out the years of both, and his chronology disagrees with that of other authors. Solis makes Montezuma II. the eleventh of the Mexican kings; but we know not how he supported so strange a paradox. De Paw, in order to shew his extravagance of genius even in this does not enumerate more than eight kings of Mexico, but it is certain and indubitable that the Mexicans had the nine kings above mentioned, and after them Cuitlahuatzin and Quauhtemotzin. Some authors do not reckon the two last among their kings, because they reigned for so short a time; but having been lawfully elected and peaceably accepted by the nation, they have as much right to be counted among the kings of Mexico as any of their ancestors. Acosta says, he does not make mention of them because they had nothing but the name of king, as in their time the whole of the kingdom almost was subject to the Spaniards; but this is absolutely false,

false, because when Cuitlahuatzin was elected, the Spaniards had only the province of the Totonacas under them, and they even were rather allies than subjects. When Quauhtemotzin was elected, they had added to that province five other states, and some small places in that neighbourhood; but all those states, compared with the rest of the Mexican empire, were less to it than Bologna is to the whole papal territory.

To investigate the chronology of these eleven kings, it is necessary to adopt another method, beginning with the last, and continuing in a retrograde course to the commencement of the monarchy.

QUAUHTEMOTZIN. This king finished his reign on the thirteenth of August, 1521, having been made prisoner by the Spaniards just as Mexico was taken. The day of his election is not known but from the accounts of Cortes it is to be inferred, that he was elected in October or November of the preceding year; wherefore he could not have reigned more than nine or ten months.

CUITLAHUATZIN. This king, successor of his brother Montezuma, ascended the throne on the beginning of July, 1520, as appears by the account given by Cortes. Some Spanish authors say that he did not reign above forty days; others say, that he reigned sixty; but from that which Cortes heard said by a Mexican officer in the war of Quauhquechollan, it is to be concluded, that that king was alive in October. We do not therefore doubt that his reign was at least three months.

MONTESUMA II. It is known that he reigned seventeen years and more than nine months, and that he began to reign in September, 1502, and died in the latter end of June, 1520. The reason why some authors have
fixed

fixed the beginning of his reign in 1503 was, because they knew that he had reigned seventeen years, and made no account of the nine months after them.

AHUITZOTL. Acofta allows this king eleven years of reign. Martinez, twelve; Siguenza, sixteen; and Torquemada, eighteen. I believe we can trace back the years of his reign, and the time of his exaltation, from the epoch of the dedication of the greater temple. This happened, without doubt, in 1486, as several authors agree. On the other hand, it appears, that king Tizoc having hardly begun this building, Ahuitzotl continued and finished it, which he could not do in the same year in which he began it, nor in two or three years, it having been so vast an edifice as we know it was. Neither could he, in so short a time, have made the war which he did in countries so distant from each other, and procure that surprising number of victims which were sacrificed on that great festival. We believe, therefore, that the commencement of his reign cannot be fixed after 1482, and neither can it be anticipated without confounding the epochs of his predecessors, as we shall presently see. Having begun therefore to reign in 1482, and finished in 1502, we ought to allow him nineteen years some months, or about twenty years of reign.

TIZOC. No person doubts that the reign of this monarch was extremely short, and no author gives him more than four years and a half of life upon the throne. We could resolve the time of his reign, and that also of his predecessor, from that of Nezahualpilli, king of Acolhuacan; for that king having been so celebrated, and had so many historians at his court, we have certain accounts of his reign. Nezahualpilli died in 1516, after having reigned in Acolhuacan forty-five years and

some months; the commencement of his reign therefore must be fixed in 1470. It is known also, that the eighth year of the reign of Nezahualpilli was the first of Tizoc, so that this last must have begun his reign in 1477, and reigned four years and a half, as several historians say. Torquemada says that he reigned less than three years; but this author contradicts himself openly, not only in this but in many other parts of his chronology, for as he adopts the above mentioned calculation of the reign of Tizoc, he ought to have fixed his death in 1480, and consequently to have given Ahuitzotl not eighteen but twenty-two years of reign.

AXAJACATL. It is known that this king began to reign six years before Nezahualpilli, that is, in 1464, and that he finished, as we have said, in 1477, when his successor Tizoc ascended the throne. From that it is deducible that he reigned thirteen years, as Siguenza and other historians affirm. Acosta does not give him more than eleven years, nor the interpreter of Mendoza's collection more than twelve. It is most probable that the thirteen years were not completed.

MONTEZUMA I. All affirm, that this famous king completed twenty-eight years on the throne. Some give him a year more, because they reckon the months which he reigned more than the twenty-eight years, another year, which has not been reckoned by others. He began therefore to reign in 1436, and finished in 1464. In his time the *Toxihumolpia*, or secular year, was celebrated, not in the sixteenth year of his reign, as Torquemada says, but in the eighteenth, or 1454.

ITZCOATL. Almost all historians give thirteen years of reign to this great king. Acosta and Martinez only give him twelve. The reason of this difference is the same

same as that above mentioned, that is, Itzcoatl not having completed the thirteen years on the throne, Acoſta and Martinez paid no attention to the odd months over the twelve years, whereas the others made a complete year of them. He began to reign in 1323; he could not begin either ſooner or later, for he aſcended the throne a year after Maxtlaton uſurped the throne of Acolhuacan. Maxtlaton reigned three years, and with him the Tepanecas finiſhed. The following year, that is, three years after Itzcoatl had begun to reign, Nezahualcojotl was eſtabliſhed on the throne of Acolhuacan, which had been uſurped by the Tepanecas. It is known beſides, that Nezahualcojotl reigned forty-three years and ſome months; he having finiſhed therefore in 1470, it appears that the commencement of his reign ought to be fixed in 1426, the ruin of the Tepanecas in 1425, the beginning of the reign of Itzcoatl in 1423, and that of the tyranny of Maxtlaton in 1422.

CHIMALPOPOCA. This unhappy king was confounded by Acoſta, Martinez, and Herrera, with his nephew Acolnahuacatl, ſon of Huitzilihuitl; from whence theſe authors allow Chimalpopoca only ten years of reign, and make him die by the hands of the Tepanecas; but the contrary appears from the paintings and relations of the Indians, cited by Torquemada, and partly ſeen by ourſelves. Siguenza, by inattention falls into a contradiction; for he ſays that Chimalpopoca was the younger brother of Huitzilihuitl: of this king he affirms, that he began to reign at eighteen years of age, and that he reigned leſs than eleven, ſo that he muſt have died before he was twenty-nine years of age; and Chimalpopoca, who immediately ſucceeded him, muſt have been at leaſt twenty-eight when he began to reign; notwithſtanding

standing Siguenza makes him ascend the throne at forty years and upwards. In the collection of Mendoza this king is not given more than ten years of reign. Torquemada and Siguenza give him thirteen, which account is certainly the most probable, considering the series of his actions and events: but Betancourt following Torquemada, makes many notable anachronisms on this subject. He fixes the election of Chimalpopoca in the time of Techotlalla, king of Acolhuacan; let us suppose that it was in the last year of this king: Techotlalla was succeeded by Ixtlilxochitl, who reigned seven years. Ixtlilxochitl by Tezozomoc, who tyrannised over that empire nine years, and to him Maxtlaton succeeded, in whose time Chimalpopoca died. According to those suppositions adopted by Torquemada and Betancourt, we must give Chimalpopoca at least sixteen years of reign, resulting from the seven of Ixtlilxochitl and the nine of Tizozomoc; which is contrary to their own chronology and that of other historians. If we choose to combine the chronology of the kings of Mexico with that of the kings of Tlatelolco, agreeably to the calculation of the above mentioned authors, there will hardly remain nineteen years to be divided between the two kings Chimalpopoca and Itzcoatl, as we shall afterwards find. Granting therefore thirteen years of reign to Chimalpopoca, according to the opinion of most historians, we ought to fix the beginning of it in 1410. Maxtlaton succeeded to Tezozomoc, his father, a year before the death of Chimalpopoca, that is, in 1422. Tezozomoc kept the crown of Acolhuacan nine years; having died in 1422, his tyranny began therefore in 1413. With respect to Ixtlilxochitl, the lawful king of Acolhuacan, we know that he reigned seven years until 1413, when
his

his life, together with his crown, was taken from him by the tyrant Tezozomoc; he began therefore to reign in 1406.

HUITZILIHUITL. Respecting the number of years which this monarch reigned historians are extremely different in opinion. Siguenza says, ten years and ten months. Acosta and Martinez give him thirteen; the Interpreter, twenty-one. Torquemada attests, that among the Mexican historians whom he consulted, some give him twenty-two years and others twenty-six; but we have no doubt that the true number of years is that mentioned by the Interpreter; because we know, from the historical paintings of the Mexicans, that the thirteenth year of this king was a secular year, which, according to our chronological table, must have been the year 1402; he began therefore to reign in 1389. Having died in 1410, as appears from what we have said concerning the reign of Chimalpopoca, we ought to allow Huitzilihuitl twenty-one years of reign.

ACAMAPITZIN. Supposing the chronology of the preceding kings to be just, and the epoch of the foundation of Mexico to be established, we have little to say with regard to the reign of this king. Torquemada affirms, that the paintings and manuscript histories fix the election of Acamapitzin in the twenty-eighth year after the foundation of Mexico. He was elected therefore in 1352, or in the beginning of 1353, and his reign must have lasted thirty-seven years, or something less. The interregnum which happened after the death of this king was of four months, as Siguenza says; whereas all the others were but of a few days.

S E C T. IV.

Concerning the Epochs of the Events of the Conquest.

IT is not very difficult to trace the epochs of the events of the conquest, because we find them in general mentioned by the conqueror Cortes, in his letters to Charles V. but many anachronisms being committed by the Spanish historians, either because they did not consult those letters, or because they were indifferent about knowing on what days the moveable festivals happened in those years of which Cortes sometimes made mention, it is necessary to fix some points of chronology, omitting others of smaller importance, to avoid proving tedious to our readers.

The arrival of Cortes's armament on the coast of Chalchiuhcuecan happened, as every one knows, on Holy Thursday, 1519. This was on the 21st of April, for Easter was that year on the 24th.

The entry of the Spaniards into the city of Tlascala did not happen, as Herrera and Gomara say, on the 23d of September, but on the 18th, as Bernal Diaz, Betancourt, and Solis write. This is easily demonstrated by making a calculation according to the account given by Cortes of the days which the Spaniards staid in Tlascala and Cholula, and those which they employed in their journey to Mexico. Bernal Diaz says, that before they entered Tlascala they were twenty-four days in the territories of that republic, and afterwards twenty in that city; as is also confirmed by the letters of Cortes. They entered Cholula on the 14th of October, and into Mexico on the 8th of November. Six days after Montezuma was made prisoner, as Cortes himself affirms.

affirms. This general remained in the capital until the beginning of May following, at which time he went to Chempoalla, to oppose Narvaez. He assaulted and gained a victory over his enemy on the Sunday of Pentecost, which that year (1520) happened on the 27th of May. The insurrection of the Mexicans, caused by the violent proceedings of Alvarado, happened on the great festival of the month Toxcatl, which began that year on the 13th of May. Cortes returned to the capital after his victory, on the 24th of June, as every one attests. In the accounts of the events which occurred in the last days of June, and the first days of July, we find some confusion and anachronisms among historians. We have followed Cortes in his letters, which contain the most authentic account of the conquest.

The death of Montezuma appears to have happened on the 30th of June, for he died, according to Cortes, three days after he received the wound from a stone. This happened while those two machines of war were constructing, of which we have made mention in our history : these were constructed on the night of the 26th of June and the day following, as is to be gathered from the account of this conqueror. We cannot fix the death of Montezuma therefore later nor sooner than the 30th, without perplexing the series of events.

The first of July we make the *noche triste*, that is, the night when the Spaniards came off defeated, for Cortes gives seven days to their journey from Mexico to Tlaxcala, and affirms that they entered there on the 8th of July. Diaz and Betancourt say, that the Spaniards left Mexico on the 10th, and entered on the 16th into the lands of that republic ; but in this particular the greatest faith is due to Cortes. The events which happened
from

from the 24th of June to the first of July will appear many, considering the shortness of the time : but it is not wonderful that in circumstances of such difficulty and danger actions should multiply, as the saving of lives called forth the greatest efforts.

The war made by the Spaniards in Quauhquechollan happened in the month of October, by what appears from the account of Cortes. This epoch becomes of importance to us, in order to know the time which Cuitlahuatzin reigned, for a Mexican Captain, of whom Cortes gained information of the state of the court, gave him intelligence of the diligence used by that king in preparations against the Spaniards. Those who do not allow Cuitlahuatzin to have reigned more than forty days, reject that information as a falsehood ; but as they allege no reason to convince us of its falsity, we ought to believe it.

Concerning the day on which the siege of Mexico began, and the time of its duration, authors in general are mistaken. They say for the first part that the siege lasted ninety-three days ; but they have not made the calculation exactly, for Cortes made the review of his troops in the great square of Tezcuco, and assigned the posts which the three divisions were to occupy on the Monday of Pentecost, in the year 1521. But although we should suppose, contrary to the truth of history, that on the same day of the review the siege was begun, there would not be ninety-three, but only eighty-five days ; for that Monday happened on the 20th of May, and it is universally known that the siege terminated with the taking of the capital on the 13th of August. If they reckon the hostilities committed on the cities of the lake to be part of the siege, they ought to fix the
beginning

beginning of the siege on the first day of January, and count not ninety-three days, but seven months to it. Cortes, who in this point merits more faith than any other historian, says expressly, that the siege commenced on the 30th of May, and lasted seventy-five days. It is true, that the letter itself of Cortes might occasion an error, for there it is given to be understood, that on the 14th of May the divisions of Alvarado and Olid were in Tacuba, from whence the siege began; but this is a manifest error in the cyphers, for it is certain that those two officers did not go to Tacuba till after the review of the troops; and we know from Cortes, and other historians, that this happened on Monday of Pentecost, the 20th of May.

Torquemada says, in book IV. cap. 46. that the Spaniards entered into Mexico, for the first time, on the 8th of November; but in chap. 14. of the same book he affirms, that this entry happened on the 22d of July; that they remained there one hundred and fifty days, ninety-five days in friendship with the Mexicans, and forty at war with them, which was occasioned by the slaughter made there by Alvarado, on the festival of the month Toxcatl, corresponding, as he believes, to our April, &c. The series of anachronisms, errors, and contradictions, contained in the chapter above cited of this author, is sufficient to give us an idea of his preposterous chronology.

DISSERTATION III.

On the Land of Mexico.

WHOEVER reads the horrid description which some Europeans give of America, or hears the injurious slander with which they speak of its soil, its climate, its plants, its animals, and inhabitants, will easily be persuaded that malice and unnatural rancour have armed their pens and their tongues, or that the new world is truly a cursed land, and destined by heaven for the punishment of malefactors. If we rest faith in count de Buffon, America is an entirely new country, scarcely arisen out of the waters which overwhelmed it (*m*), a continual marsh in its plains, a land uncultivated and covered with woods, even after having been peopled by Europeans more industrious than Americans, or incumbered with mountains that are inaccessible, and leave but a small territory for cultivation and the habitations of men; an unhappy region, lying under a fordid sky, where all the animals that have been transported from the old continent are degenerated, and those native to its clime are small, deformed, weak, and destitute of arms for their defence. If we credit Mr. de Paw (who in a great measure copies the sentiments of count de Buffon, and where he does not copy, multiplies and exaggerates errors) *America has been in general, and is at present a very barren country*, in which all the plants of Europe have degenerated, except those which are aquatic and succulent. Its stinking soil bears a greater number of poisonous plants than all the other parts of the world.

(*m*) Hist. Natur. tom. vi.

world. Its lands, either overloaded with mountains, or covered with woods, present nothing to the eye but a vast and barren desert ; its climate is extremely unfavourable to the greater part of quadrupeds, and most of all pernicious to men, who are degenerated, debilitated, and vitiated in a surprising manner in all the parts of their organization (n).

The historiographer Herrera, although in many respects judicious and moderate, when he makes a comparison of the climate and soil of Europe with America, shews himself eminently ignorant even of the first elements of geography, and utters such absurdities as would not be tolerated in a child. “ *Our hemisphere*, he says, *is better than the new one with respect to climate. Our pole is more embellished with stars, because it has the north to $3\frac{1}{2}$ degrees, with many resplendent stars.* By which he supposes, first, that the southern hemisphere is new, though so many centuries are past since it has been known in Asia and Africa. Secondly, that all America belongs to the southern hemisphere, and that North America is not connected with the same pole and stars of the Europeans. *We have*, he adds, *another pre-eminence, which is, that the sun is seven days longer towards the tropic of Cancer than towards that of Capricorn ;* as if the excess of the sun’s stay in the northern hemisphere was not the same in the new as in the old continent. It appears that our good historiographer was persuaded, that the greater love which that luminary bears to beautiful Europe was the cause of his longer stay in the northern hemisphere. A thought truly gallant, and fit for a French poem, and from whence it comes, proceeds our chronicler,

(n) *Recherches Philosophiques, parte i.*

chronicler, that the Arctic is colder than the Antarctic part, because it enjoys less of the sun. But how can there be less of the sun enjoyed in the Arctic part, when this luminary is seven days longer in the northern hemisphere? *Our land extends from west to east, and is therefore more accommodating to human life than the other, which growing narrow from west to east, enlarges too much from one to the other pole; for the land which lengthens itself from west to east is at a more equal distance from the cold of the north, and the heat of the south.* But if the north is the region of cold, and the south that of heat, as our chronicler supposes, the equinoctial countries, according to his principles, would certainly be the best calculated for human life, from being those which are equidistant from north and south. In the other hemisphere our author concludes, there were no dogs, asses, sheep, or goats, and no lemons, oranges, figs, nor quinces, &c.

These, and other such absurd notions of several authors, are the effects of a blind and immoderate partiality to their own country, which makes them ascribe to it certain imaginary pre-eminences over all others in the world. It would not be difficult to oppose to their invectives the great praises which many very celebrated Europeans, better informed than them, have bestowed on those countries; but besides that, it would be foreign to our purpose, it would be disgusting to our readers: we shall therefore content ourselves with examining in this Dissertation that which has been written against the land of America in general, or against that of Mexico in particular.

SECT.

S E C T. I.

On the pretended Inundation of America.

ALMOST all that M. Buffon and M. de Paw have written against the land of America, respecting its plants, its animals, and its inhabitants, is founded on the supposition of a general inundation, different from that which happened in the time of Noah, and much more recent, on account of which that vast country remained a long time under water. From this recent inundation arises, says M. Buffon the malignity of the climate of America, the sterility of its soil, the imperfection of its animals, and the coldness of the Americans. Nature had not had time to put her designs in execution, nor to take all her extension. The lakes and the marshes left by that inundation, according to the affirmation of M. de Paw, occasion the excessive humidity of the air which is the cause of its insalubrity, of the extraordinary multiplication of insects, of the irregularity and smallness of the quadrupeds, of the sterility of the soil, of the barrenness of the women, of the abundance of milk in the breasts of the men, of the stupidity of the Americans, and a thousand other extraordinary phænomena which he has observed much more distinctly from his closet in Berlin, than we who have passed so many years in America. These two authors, though they are agreed with respect to an inundation, differ with respect to the time of it; for M. de Paw believes it to have been much more ancient than M. Buffon does.

This supposition, however, is ill founded, and the inundation pretended to have happened to the new world is a chimera. M. de Paw endeavours to support it on the
testimony

testimony of Acofta, on the almost infinite number of lakes and marfhcs, on the veins of heavy metals, which are found almost on the furface of the earth, on the marine bodies which are found heaped together lying in the moft low inland places, on the deftruction of the great quadrupeds, and, laftly, on the unanimous tradition of the Mexicans, Peruvians, and all the favages from the land of Magellan to the river St. Lawrence, who all testify of their ancestors on the mountains during the time the valleys were laid under water.

It is true that Acofta, in book I. chap. 25 of his hiftory, doubts whether that which the Americans fay of the deluge ought to be underftood of that of Noah, or of fome other particular one which happened in their land, as thofe of Deucalion and Ogyges in Greece ; and it appears alfo that he inclines to adhere to this opinion which he fays has been adopted by fome judicious men : but, notwithstanding, in book V. chap. 19, fpeaking of the firft conquest of the Incas, he gives us to underftand that he firmly believed, that it ought to be underftood of the deluge of Noah. “ The pretext, (he fays) under which they conquered and rendered themfelves mafters of the land was that of feigning that after the *universal deluge* (of which all thofe Indians had knowledge) they had new peopled the world, feven of them iffuing from the cave of Pacaritambo, and that all other men therefore ought to render them homage as their progenitors.” Acofta, therefore, knew that that tradition of the Americans refpected the univerfal deluge, and that the fables with which it was blended had been invented by the Incas to eftablifh the right of their empire. What would that author have faid, if he had had thofe proofs in favour of the tradition which we have ? The Mexicans,

cans, as their own historians affirm, make no mention of the deluge, without commemorating also the confusion of tongues and the dispersion of the people, and those three things were represented by them in a single painting, as appears from that picture which Siguenza had from D. F. d'Alba Ixtlilxochitl, and he from his noble ancestors, a copy of which has been given in our history. The same tradition has been found among the Chiapanese, the Tlascalans, the people of Michuacan, of Cuba, and the Indians of the continent, with the circumstance of a few men, with some animals having been saved in a vessel from the deluge, and having set at liberty first a bird, which did not return again to the vessel, because it remained eating carrion, and afterwards another, which returned with a green branch in its mouth : this renders it evident, that they did not speak of any other deluge than that which drowned all the earth in the time of the patriarch Noah. All the circumstances which have disguised or changed this most ancient and universal tradition among nations, have either been allegories, such as those of the seven caves of the Mexicans, to signify the seven different nations which peopled the country of Anahuac, or the fictions of ignorance or ambition. None of those nations believed that men were saved upon the mountains, but in an ark or vessel, or, if possible, any one thought otherwise, it was certainly because the tradition of the deluge, after so many centuries, had been changed. It is therefore absolutely false that there was an unanimous tradition of an inundation peculiar to America, among all those people who dwelt between the land of Magellan and the river St. Lawrence.

The lakes and the marshes which appear to Mr. Buffon and Mr. de Paw incontestible marks and traces of this

this pretended inundation, are unquestionably the effects of the great rivers, the innumerable fountains, and the very plentiful rains of America. If those lakes and marshes had been made by that inundation, and not by the causes we have assigned, they would, after so many ages, have been consumed and dried up by the continual evaporation which the heat of the sun produces, particularly under the torrid zone; or at least they would have been considerably diminished; but no diminution is observable, except in those lakes, from which human industry has diverted the rivers and torrents which discharged themselves into them, as in those of the vale of Mexico. We have seen and observed the five principal lakes of New Spain, which are those of Tezcuco, Chalco, Cuisco, Pazcuaro, and Chapalla, and are confident that they have not been formed, nor are preserved, but by plentiful rain-waters, rivers, and fountains. All the world is acquainted, that no rains are more copious and violent, nor any rivers so great, as those of America. Why then invent inundations while we have causes at hand more natural and certain? If the lakes were proofs of an inundation, we ought rather to believe it to have happened in the old than in the new continent, because all the lakes of America, including even those of Canada, which are the largest, are not comparable to the Black, White, Baltic, and Caspian seas, which though vulgarly called seas, are, however, according to Buffon himself, true lakes, formed by rivers which pour into them. If to those we add the lakes of Lemano, Onega, Pleskow, and many others, extremely large, of Russia, Tartary, and other countries (*p*), we will soon discover how much they,

(*p*) Bomare enumerates thirty-eight lakes in the cantons of Switzerland, and says, that into that of Harlem vessels of great size enter. The lake of Aral in Tartary has, according to the same author, a hundred leagues of length and fifty of breadth.

they, who have so exaggerated the lakes of America, had forgotten the nature of their own continent. The lake of Chapalla, which, in the geographical maps, is honoured with the magnificent name of Mare Chapallicum, or sea of Chapalla, which we have also seen and coasted round three times, is hardly a hundred miles in circumference. But if the rivers Don, Wolga, Borysthenes, Danube, Oder, and others of the ancient continent, though less by far than the Maragnon, the river of Plata, that of Maddalena, St. Lawrence, Oroonoko, Mississippi, and others of the new world, are nevertheless extremely sufficient, according to what Buffon says, to form those lakes which are so great, that they have always been esteemed seas, what wonder is it that the monstrous rivers of America make smaller lakes and marshes? Mr. de Paw says, that those lakes appear receptacles of water, which have not yet been able to issue from those places formerly overflowed by a violent agitation given to all the terraqueous globe. The numerous volcanos of the *Andes*, or American Alps, and of the hills of Mexico, and the earthquakes which are incessantly felt in one part or other of those Alps, let us see that that land is not yet at repose even in our day. But if that violent agitation was general over the terraqueous globe, how came the lands of Peru and Mexico to be inundated, which are so highly elevated above the level of the sea, as Buffon and de Paw both confess, and not the lands of Europe, which are so very much lower? Whoever has observed the stupendous elevation of the inland countries of America, will not easily persuade himself that the water could rise so as to cover them without inundating Europe. Besides, we may also say, that Vesuvius, Etna, Hecla, and the nu-

merous volcanos of the Moluccas, the Philippine islands, and Japan, and the frequent earthquakes of those islands, and of China, Persia, Syria, Turkey; &c. let us also see that even the old world is not yet at repose in our day (*r*).

The veins of metals, adds de Paw, which are found in some places on the surface of the earth, appear to indicate that the soil was once overflowed, and that the torrents carried away part of it. But would it not be better to say, that some violent eruptions of subterraneous fires, which appear manifest in the many volcanos of the Cordilleras, destroying the surface of some soils, left the veins of metals almost naked?

The finding of marine bodies heaped together in some inland places of America, if it should prove the pretended inundation would prove still more strongly a greater inundation of the old continent; for whereas there are few places in America in which these masses of sea-shells, and other petrified marine bodies, are found; Europe, on the contrary, is almost full of petrifications of such bodies, which demonstrates with certainty that it was formerly overflowed by the sea (*s*). Every person knows the wonders and the calculations which several French natural philosophers have made of that immense quantity of shells which are seen in Tourain, and nobody

is

(*r*) M. de Paw himself, after having made mention of Vesuvius, Etna, Hécla, and the volcanos of Liparis, speaks thus: "Amongst the great volcanos are reckoned the *Paraniucan*, in the island of Java; the *Canapis*, in the island of Banda; the *Balaluan* in the island of Sumatra. The island of Ternate has a flaming mountain, the irruptions of which are not inferior to those of Etna. Of all the islands, small and large, which compose the empire of Japan, there is not one which has not a volcano that is not more or less considerable; and also the Philippine isles, the Azores, the Cape de Verd Islands, &c." Letter III. *Sur les Vicissitudes du notre Globe.*

(*s*) Burguet, in his *Treatise on Petrifications*, and Torribia, in his *Introduction to the Natural History of Spain*, gives us a very long account of the places of Europe and Asia, where petrified marine bodies are found.

is ignorant either that such kind of petrified marine bodies are found also in the Alps. Why then ought we to conclude, from some marine bodies having been found in some places of America, that that country suffered an inundation, and not still more confidently conclude, that Europe has suffered an inundation from such bodies having been found in still greater abundance in many places of it ? If the transportation of those bodies to inland places of Europe is to be ascribed to the waters of the universal deluge, why ought they not to be ascribed to the same cause in America (*t*) ? On the contrary, if the waters of the universal deluge were not those which carried the above mentioned marine bodies into the inland places of Europe, but those of a posterior inundation : if Europe is in general, according to what Buffon says (*u*), a new country : if it is not long since it was covered with woods and marshes, why do we not see in Europe, and why were there not seen two thousand years ago, those stupendous effects of the inundation which those authors see in America ? Why have the animals of Europe degenerated like those of America ?

(*t*) One of the highest mountains of America is the *Descabazado*, situated among the alps of Chili, upwards of five hundred miles from the sea. Its perpendicular height above the level of the sea is, according to Molina, a learned and diligent historian of that kingdom, more than three miles. On the top of this very lofty mountain is found a great quantity of petrified marine bodies, which certainly could not have been carried to that stupendous height by the waters of any partial inundation, different from the deluge which happened in the time of Noah. Neither can it be said that that summit might formerly have been the bed of the sea, and gradually have been raised by subterraneous fires, bearing along with it those marine bodies ; because although this case is not improbable in some places, which we see but a little elevated above the level the sea, and we even think it may frequently have happened, notwithstanding, in a height so extraordinary as this, it appears entirely incredible : so that those marine bodies, found on that summit, ought to be considered as unquestionable proofs and indubitable traces of the universal deluge.

(*u*) Tom. Theorie de la Terre.

rica? Why are not the Europeans cold in constitution like the Americans? Why are or have not the women of both the one and the other part of the world been equally barren? Why, if Europe was overflowed like America, and more so, and for a much longer time than it, as is clearly deducible from the arguments of Buffon, has its soil remained fertile, and that of America barren? Why are the skies of Europe so mild, those of America so inclement? Why to Europe should all the blessings have been destined, to America all the evils? Whoever would be better informed respecting those difficulties, may read Buffon on the inundation of Europe.

The last argument of M. de Paw is taken from the extinction or destruction of the great quadrupeds in America, which he says are the first to perish in water. This author believes that anciently there were elephants, camels, sea-horses, and other large quadrupeds in America, but that they all perished in this supposed inundation. But what person will not wonder that elephants and camels, who are so swift, should perish, and that the sloth, which is so slow, and unable to move, should escape? that they could not, as well as men, betake themselves to the mountains, either by swimming, at which they are most dexterous, or by availing themselves of the swiftness of their feet, which is so great, that in one day, according to the account of Buffon, they go one hundred and fifty miles; and yet the sloths could find leisure to ascend to the tops of the mountains, which, according to the account of the same author, can hardly move a perch in an hour? Although we should admit that such quadrupeds have been formerly in America, we are not obliged to believe that their destruction has been occasioned by the supposed inundation, because it

might

might be ascribed to other causes very different. M. de Paw himself affirms (*x*), that if elephants were transported to America, as the Portuguese have attempted, they would meet with the same fortune with camels; that they would not propagate, although they were left in the woods to their own instinct; because the change of aliment and clime is infinitely more sensibly felt by elephants than all other quadrupeds of the largest kind. He likewise declares in another place, that the causes which operate to the destruction of those animals, that is, the quadrupeds of the new world, are difficulties of a high degree, and at the same time one of the most interesting subjects of the natural history of the terraqueous globe. Why then does he decide so positively, that the supposed inundation was the cause of their extirpation?

Buffon endeavours to persuade us of the recent inundation of America by several arguments, to which we will answer in a few words. *If this continent is as ancient as the other*, he says, speaking of America, *why have so few men been found there?* The men who have been found there cannot be called few, but in respect to the very extensive country which they have inhabited. Those who lived in societies, as the Mexicans, the natives of Michuacan, the Acolhuas, and others who occupied all that very extensive tract of the country, which lies between nine and twenty-three degrees of latitude, and two hundred and seventy-one and two hundred and ninety-four of longitude, were bodies of people as numerous as those of Europe, which we shall shew in another dissertation (*y*). Those who lived more dispersed, formed smaller

(*x*) Recherches Philosophiques, parte i.

(*y*) These arguments of the count de Buffon against the antiquity of America, are found in the sixth volume of his Natural History; but a little before, in the same volume, he says thus: "There have been discovered in Mexico
ico

smaller nations or tribes, because their smaller multiplication has been always a necessary effect of savage life in all countries in the world. "If savages are shepherds," says Montesquieu, they require a great country to be "able to subsist in a certain number. If they are hunters, as the savages of America were, they exist in still smaller numbers, and in order to maintain themselves, form a still less populous nation."

Why, returns Mr. Buffon to ask, were they almost all savage and dispersed? It is not so. How can it be said they were all savage and dispersed; whilst we know that the Mexicans, the Peruvians, and all the people subject to them, lived in societies; which, as Mr. Buffon himself confesses, were extremely numerous, and cannot be called new. The other nations continued savages, from a violent attachment to liberty or some other cause of which we are ignorant. In Asia, although it is a most ancient country, there are still many nations that are savage and dispersed. Why, he says, have those who were united in societies, hardly counted two or three hundred years since they assembled? This is another error. The Mexicans hardly counted two hundred years from the foundation of their capital; the Tlascalans something more from the establishment of their republic, but those nations, and the others subjected to them, lived in society from time immemorial, as well as the Toltecas, Acolhuas, and Michuacanese. Neither Buffon, de Paw, nor Dr. Robertson, can distinguish the establishment of those nations in Anahuac, from the settlements

ico and Peru, civilized men, and cultivated people, subject to laws, and governed by kings; they possessed industry, arts, and a species of religion; they lived in cities in which order and government were maintained under the authority of a sovereign. These people, are certainly very numerous, and cannot be said to be new," &c.

lements which they had many centuries before in the northern regions of the new world.

“ Why, he again asks, were those nations who lived
 “ in society ignorant of the art of transmitting to posterity the memory of events by means of durable signs,
 “ considering that they had found the manner of communicating together at a distance by means of knots
 “ on cords ?” What then were the pictures and characters of the Mexicans, and the other polished nations of Anahuac, if not durable signs, destined to perpetuate the memory of events ? See what Acoſta has ſaid on this ſubject, in the ſixth book of chap. 7. of his hiſtory, and what we ſay in our diſſertation on the culture of the Mexicans.

Why, he continues, had they not domeſticated animals, nor employed any other than the Llama (z) and Paco, which were not domeſtic, faithful, and docile, like ours ? Be cauſe there were no others which could be domeſticated. Does Mr. Buffon think that they ſhould have domeſticated tygers, *Pume*, wolves, and other ſuch wild beaſts ? M. de Paw reproaches the Americans for their little induſtry, in not having employed the reindeer as the Laplanders have ; but thoſe animals were not to be found but in countries extremely diſtant from Mexico ; and the ſavages in whoſe lands thoſe animals were found, would not make uſe of them, be cauſe they had no occaſion for them, or it did not come into their minds to domeſticate them. Beſides, the propoſition of Mr. Buffon taken in ſo general a ſenſe, is certainly falſe ;

as

(z) Llama, not Lama was, according to what Acoſta ſays, the generic name of the four ſpecies of quadrupeds of that kind ; but at preſent it is uſed only to ſignify the one which the Spaniards called *Carnus*, that is, the ram of Peru. The other three ſpecies are the *Paco*, the *Guanaco* or *Huannaco*, and the *Vicugna*. The name Llama is pronounced *Lyama*.

as he himself says that the *alco*, or *techiche*, a quadruped similar to a little dog, which is common to both Americas, was domesticated by the Indians. In the same manner the Mexicans domesticated rabbits, ducks, turkeys, and other animals.

“ Lastly, their arts, concludes Mr. Buffon, were as
 “ rude as their society, their talents inferior, their ideas
 “ not yet developed, their organs rough, and their language barbarous :” the errors contained in those words we shall effectually refute in the following dissertations.

We must, therefore, upon the whole, deny that pretended inundation, as one of those philosophical chimeras invented by the unquiet geniuses of our century : since among the Americans there has been no memory of any other inundation than that universal deluge of which the Scriptures make mention. We would, on the contrary, say, that if it was true that the deluge of Noah did not overflow the whole earth, no country might be sooner supposed to have been exempted from that calamity than Mexico ; for besides its great elevation above the level of the sea, there is no inland country where petrified marine bodies are more rare.

S E C T. II.

On the Climate of Mexico.

IF we were to employ ourselves to refute all the absurd notions which M. de Paw has written against the climate of America, a large volume, instead of a dissertation, would be necessary. Let it suffice to say, he has collected all that has been said by several authors, right or wrong, against different particular countries of the

New

New World, in order to present his readers with an assemblage of fictions that is monstrous and horrid, without considering, that if we were to follow his steps, and undertook to make a similar representation of the different countries of which the old continent is composed, (which would not be difficult) we would make a description still more hideous than his; but as it would be foreign to our purpose we will confine ourselves to treat of the climate of Mexico.

This country, as it is extremely extensive, and divided into so many provinces, different in their situation, is necessarily subjected to a variety of climes. Some of its lands, such as the maritime, are hot, and in general moist and unhealthy; others are like all inland places, temperate, dry, and healthy. The latter are extremely high, the former very low. In some the south wind, in others the east, and in others the north wind prevails. The greatest cold of any of the inhabited places, does not equal that of France or even Castile; nor can the greatest heat be compared to that of Africa, or the dog-days in many countries of Europe. The difference between winter and summer is so little in any part, that the most delicate persons wear the same clothes in August and January. This and a good deal more which we have already said, respecting the mildness and sweetness of that climate is so notorious, that there is no need of arguments to support it.

M. de Paw in order to demonstrate the malignity of the American climate, adduces first the smallness and irregularity of the animals of America. Secondly, the size and enormous multiplication of the insects, and other little animals. Thirdly, the diseases of the Americans, and particularly the venereal disorder. Fourthly, the

defects of their natural constitution. Fifthly, the excess of cold in the countries of America, in comparison of those of the old continent, situated at an equal distance from the equator.

But this supposed smallness and less ferocity of the American animals, of which we shall treat hereafter, instead of the malignity, demonstrate the mildness and bounty of the clime, if we give credit to Buffon, at whose fountain Sig. de Paw has drank, and of whose testimony he has availed himself against Don Pernetty. Buffon who in many places of his *Natural History* produces the smallness of the American animals as a certain argument of the malignity of the climate of America; in treating afterwards of savage animals, in tom. II. speaks thus: "As all things, even the most free creatures, are subject to natural laws, and animals as well as men are subjected to the influence of climate and soil, it appears that the same causes which have civilized and polished the human species in our climates, may have likewise produced similar effects upon other species. The wolf, which is perhaps the fiercest of all the quadrupeds of the temperate zone, is however incomparably less terrible than the tyger, the lion, and the panther of the torrid zone; and the white bear and hyena of the frigid zone. In America, where the air and the earth are more mild than those of Africa, the tyger, the lion, and the panther, are not terrible but in the name. They have degenerated, if fierceness joined to cruelty, made their nature; or, to speak more properly, they have only suffered the influence of the climate: under a milder sky their nature also has become more mild. From climes which are immoderate in their temperature are obtained drugs, perfumes, poisons, and all those plants whose qualities are strong.

strong. The temperate earth on the contrary, produces only things which are temperate; the mildest herbs, the most wholesome pulse, the sweetest fruits, the most quiet animals, and the most humane men are the natives of this happy clime. As the earth makes the plants, the earth and plants make animals; the earth, the plants, and the animals make man. The physical qualities of man, and the animals which feed on other animals, depend, though more remotely, on the same causes, which influence their dispositions and customs. This is the greatest proof and demonstration, that in temperate climes every thing becomes temperate, and that in intemperate climes every thing is excessive; and that size and form which appear fixed and determinate qualities, depend notwithstanding, like the relative qualities, on the influence of climate. The size of our quadrupeds cannot be compared with that of an elephant, the rhinoceros, or sea-horse. The largest of our birds are but small if compared with the ostrich, the condore, and *casoare*." So far Mr. Buffon, whose text we have copied, because it is of importance to our purpose, and entirely contrary to what M. de Paw writes against the climate of America, and Buffon himself in many other places.

If the large and fierce animals are natives of intemperate climes, and small and tranquil animals of temperate climes, as Mr. Buffon has here established; if mildness of climate influences the disposition and customs of animals, Mr. de Paw does not well deduce the malignity of the climate of America from the smaller size and less fierceness of its animals; he ought rather to have deduced the gentleness and sweetness of its climate from this antecedent. If, on the contrary, the smaller size and less fierceness of the American animals, with respect to
those

those of the old continent, are a proof of their degeneracy, arising from the malignity of the clime, as Mr. de Paw would have it, we ought in like manner to argue the malignity of the climate of Europe from the smaller size and less fierceness of its animals, compared with those of Africa. If a philosopher of the country of Guinea should undertake a work in imitation of M. de Paw, with this title, *Recherches Philosophiques sur les Europeens*, he might avail himself of the same argument which M. de Paw uses to demonstrate the malignity of the climate of Europe, and the advantages of that of Africa. The climate of Europe, he would say, is very unfavourable to the production of quadrupeds, which are found incomparably smaller, and more cowardly than ours. What are the horse and the ox, the largest of its animals, compared with our elephants, our rhinoceroses, our sea-horses, and our camels? What are its lizards, either in size or intrepidity, compared with our crocodiles? Its wolves, its bears, the most dreadful of its wild beasts, when beside our lions and tigers? Its eagles, its vultures, and cranes, if compared with our ostriches, appear only like hens. In order to avoid prolixity, we omit other such observations which might be made against Europe, still adhering to the materials and words of M. de Paw. What Buffon and de Paw would answer to that African philosopher, we will now answer to those philosophers of Europe; since their arguments either do not prove, that the climate of America is bad, or say that the climate of Europe is bad, or at least that the African is better than the European climate.

From the scarcity and smallness of quadrupeds M. de Paw passes to the enormous size, and prodigious multiplication of the insects, and other noxious little animals.

mals. “ The surface of the earth, he says, infected by
“ putrefaction, was over-run with lizards, serpents, rep-
“ tiles, and insects monstrous for size, and the activity
“ of their poison, which they drew from the copious
“ juices of this uncultivated soil, that was corrupted and
“ abandoned to itself, where the nutritive juice became
“ sharp, like the milk in the breast of animals which do
“ not exercise the virtue of propagation. Caterpillars,
“ crabs, butterflies, beetles, spiders, frogs, and toads,
“ were for the most part of an enormous corpulence in
“ their species, and multiplied beyond what can be ima-
“ gined. Panama is infested with serpents, Carthage-
“ na with clouds of enormous bats, Portobello with
“ toads, Surinam with *kakerlacas* or *cucarachas*, Gua-
“ daloupe, and the other colonies of the islands, with
“ beetles, Quito with niguas or chegoes, and Lima with
“ lice and bugs. The ancient kings of Mexico, and
“ the emperors of Peru, found no other means of rid-
“ ding their subjects of those insects, which fed upon
“ them, than the imposition of an annual tribute, of a
“ certain quantity of lice. Ferdinand Cortes found bags
“ full of them in the palace of Montezuma.” But this
argument, full throughout of falsity and exaggerations,
proves nothing against the climate of America in gene-
ral, much less against that of Mexico. There being some
lands in America, in which, on account of their heat,
humidity, or want of inhabitants, large insects are found
and excessively multiplied, will prove at most that in some
places the surface of the earth is infected, as he says,
with putrefaction; but not that the soil of Mexico, or
that of all America is stinking, uncultivated, vitiated,
and abandoned to itself, as is weakly asserted by M. de
Paw. If such a deduction were just, he might also say,

That

That the soil of the old continent is barren, and stinks ; as in many countries of it there are prodigious multitudes of monstrous insects, noxious reptiles, and vile animals, as in the Philippine Isles, in many of those of the Indian archipelago, in several countries of the south of Asia, in many of Africa, and even in some of Europe. The Philippine Isles are infested with enormous ants, and monstrous butterflies ; Japan with scorpions ; south of Asia and Africa, with serpents ; Egypt with asps ; Guinea and Ethiopia, with armies of ants ; Holland with field-rats ; Ukrania, with toads, as M. de Paw himself affirms (*i*). In Italy, the Campagna di Roma (although peopled for so many ages), with vipers, Calabria with tarantulas, the shores of the Adriatic sea with clouds of gnats ; and even in France, the population of which is so great and so ancient, whose lands are so well cultivated, and whose climate is so celebrated by the French, there appeared, a few years ago, according to Mr. Buffon, a new species of field mice, larger than the common kind, called by him *Surmulots*, which have multiplied exceedingly, to the great damage of the fields. Mr. Bazin, in his Compendium of the history of Insects, numbers seventy-seven species of bugs, which are all found in Paris and its neighbourhood. That large capital, as Mr. Bomare says, swarms with those disgusting insects. It is true that there are places in America where the multitude of insects, and filthy vermin, make life irksome ; but we do not know that they have arrived to such excess of multiplication as to depopulate any place, at least there cannot be so many examples produced of this cause of depopulation in the new as in the old continent, which are attested by Theophrastus, Varro,

(*i*) *Defense des Recherches Philosophiques, sur les Americains, chap. 13.*

ro, Pliny (*k*), and other authors. The frogs depopulated one place in Gaul, and the locusts another in Africa. One of the Cyclades, was depopulated by mice; Amiclas, near to Taracina, by serpents; another place, near to Ethiopia, by scorpions and poisonous ants; and another by scolopendras; and not so distant from our own times, the Mauritius was going to have been abandoned on account of the extraordinary multiplication of rats, as we can remember to have read in a French author.

With respect to the size of the insects, reptiles, and such animals, M. de Paw makes use of the testimony of Mr. Dumont, who, in his *Memoirs on Louisiana*, says, that the frogs are so large there that they weigh thirty-seven French pounds, and their horrid croaking imitates the bellowing of cows. But who can trust to that author, particularly after knowing what Mr. de Paw says, (in his answer to Don Pernetty, cap. 17.) that all those who have written about Louisiana from Henepin, Le Clerc, and Cav. Tonti, to Dumont, have contradicted each other sometimes on one and sometimes on another subject. We wonder however, that M. de Paw should have had the boldness to write that these monsters do not exist in the rest of the world. We know extremely well that there are neither in the old nor new continent frogs of thirty-seven pounds in weight; but there are in Asia and Africa serpents, butterflies, ants, and other animals of such monstrous size, that they exceed all those which have been discovered in the new world. In what place of America has a serpent of fifty Roman cubits in length been seen, such as that which was shewn by Augustus to the Roman people at the public spectacles, as historians affirm (*l*), or so gross as that which

(*k*) Pliny Hist. Natur. lib. viii. cap. 19. (*l*) Suetonius in Octaviano Cæsare.

which was killed in the Vatican in the time of the emperor Claudius, and attested by Pliny, an author almost cotemporary, in the belly of which an entire child was found. But, above all, where has there been seen, even in the most solitary woods of America, a serpent which can in any manner be compared with that most enormous and prodigious one of one hundred and twenty feet in length, seen in Africa at the time of the first Punic war, and killed with war machines by the army of Attilius Regulus, the skin and jaw-bones of which were preserved in a temple of Rome, until the war of Numantia, according to the testimonies of Livy, Pliny, and other Roman historians? We know very well that some American historian says, that a certain gigantic species of serpents is to be found in the woods, which attract men with their breath, and swallow them up; but we know also that several historians, both ancient and modern, report the same thing of the serpents of Asia, and even something more. Megasthenes, cited by Pliny, said, that there were serpents found in Asia, so large, that they swallowed entire stags and bulls (*m*). Metrodorus, cited by the same author, affirms, that in Asia there were serpents which, by their breath, attracted birds, however high they were, or quick their flight. Among the moderns, Gemelli, in vol. V. of his Tour of the World, when he treats of the animals of the Philippine

(*m*) Megasthenes scribit, in India serpentes in tantam magnitudinem adolefcere, ut solidos hauriant cervos taurosque. Metrodorus circa Rhyndacum amnem in ponto ut supervolantes quamvis alte perniciterque, alites haustu raptas absorbeant. Nota est in Punicis bellis ad flumen Bagradam an Regulo imper. ballestis tormentisque ut oppidum aliquod expugnata serpens CXX pedum longitudinis. Pellis ejus maxillæque usque ad bellum Numantinum duravere Romæ in templo. Faciunt his fidem in Italia appellatæ boxæ in tantam amplitudinem excurrentes ut Divo Claudio, principe occisæ in Vaticano solidus in alvo spectatus sit infans. Plin. Hist. Nat. lib. viii. cap. 14.

pine isles, speaks thus: "There are serpents in these
 "islands of immoderate size; there is one called *Ibitin*,
 "very long, which suspending itself by the tail from
 "the trunk of a tree, waits till stags, bears, and also
 "men pass by, in order to attract them with its breath,
 "and devour them at once entirely:" from whence it
 is evident, that this very ancient fable has been common
 to both continents (*n*).

Mr. de Paw would perhaps say, that these monstrous
 animals were formerly seen in the old continent when its
 clime was not yet perfected. But when that which the
 ancients wrote is compared with that which we know of
 Asia and Africa at present, who is there that will not
 perceive that the climate of those countries is at present,
 for the most part, what it was two thousand years ago;
 that there is the same heat, the same dryness or humid-
 ity, the same kind of plants, animals, and men, &c.
 Besides, even in our days, various sorts of monstrous
 animals have been seen in those regions which infinitely
 surpass those analogous to them in the new world. In
 what country of America could M. de Paw find ants
 to equal those of the Philippine islands, called *Sulum*, re-
 specting which Hernandez (*o*) affirms, that they are six
 fingers broad in length, and one in breadth? Who has
 ever seen in America butterflies so large as those of
 Bourbon, Ternate, the Philippine isles, and all the Indian
 Archipelago? The largest bat of America (native to
 hot shady countries) which is that called by Buffon *vam-
 piro*, is, according to him, of the size of a pigeon. *La
 Rougette*, one of the species of Asia, is as large as a
 raven; and the *Rouffette*, another species of Asia, is as
 VOL. III. Z big

(*n*) See Bomare on the *Minia* of Africa, and the *Reinberab* of Ceylon.

(*o*) Hern. Hist. Insector. N. Hisp. cap. 30.

big as a large hen (*p*). Its wings, when extended, measure from tip to tip three Parisian feet, and according to Gemelli, who measured it in the Philippine isles (*q*), six palms. Mr. Buffon acknowledges the excess in size of the Asiatic bat over the American species, but denies it as to number. Gemelli says, that those of the island of Luzon were so numerous that they darkened the air, and that the noise which they made with their teeth, in eating the fruits of the woods, was heard at the distance of two miles (*r*). M. de Paw says, in talking of serpents (*s*), “it cannot be affirmed that the new world “has shewn any serpents larger than those which Mr. “Adanson saw in the deserts of Africa.” The greatest serpent found in Mexico, after a diligent search made by Hernandez, was eighteen feet long; but this is not to be compared with that of the Moluccas, which Bomare says is thirty-three feet in length (*t*); nor with the *Anacandaja* of Ceylon, which the same author says is more than thirty-three feet long (*u*); nor with others of Asia and Africa, mentioned by the same author. Lastly, the argument drawn from the multitude and size of the American insects is fully as weighty as the argument drawn from the smallness and scarcity of quadrupeds, and both detect the same ignorance, or rather the same voluntary and studied forgetfulness of the things of the old continent.

With

(*p*) Buffon, Hist. Nat. tom. xix.

(*q*) Gemelli, tom. v.

(*r*) What Gemelli says respecting the surprising noise of the bats of the island of Luzon is confirmed by several persons worthy of credit, who have been some years in that island.

(*s*) Defense des Recherch. Philosoph. chap. 22.

(*t*) Bomare Diction. Univ. d' Histoire Natur. V. *Couleurs*.

(*u*) Id. V. *Anacandaja*.

With respect to what Mr. de Paw has said of the tribute of lice in Mexico, in that, as well as in many other things, he discovers his ridiculous faith. It is true that Cortes found bags of lice in the magazines of the palace of king Axajacatl. It is also true, that Montezuma imposed such a tribute, not on all his subjects however, but only on those who were beggars, not on account of the extraordinary multitude of those insects, as Mr. de Paw affirms, but because Montezuma, who could not suffer idleness in his subjects, resolved that that miserable set of people, who could not labour, should at least be occupied in lousing themselves (*). This was the true reason of such an extravagant tribute, as Torquemada, Betancourt, and other historians relate, and nobody ever before thought of that which Mr. de Paw affirms merely because it suited his preposterous system. Those disgusting insects possibly abound as much in the hair and clothes of American beggars, as of any poor and uncleanly low people in the world; but there is not a doubt that if any sovereign of Europe was to exact such tribute from the poor in his dominions, not only bags but great vessels might be filled with them.

Lastly, to reserve the examination of the proofs of the bad climate of America, founded on the diseases and defects of the physical constitution of the Americans to another Dissertation, in which we will demonstrate the errors and puerile prejudices of Mr. de Paw, let us attend to what he says on the excess of cold in the countries of the new world with respect to those of the old, which are situate at an equal distance from the equator.

“Comparing,”

(*) It is certain that Montezuma was extremely attentive to cleanliness, as well as an enemy to idleness; it is therefore extremely probable that from both these motives he was induced to impose that extraordinary tribute.

“Comparing,” he says, “the experiments made with thermometers in Peru, by Mess. Condamine and d’Uloa with those of the indefatigable Mr. Adanson in Senegal, it is easily understood, that the air is less hot in the new than in the old world. Upon calculating, with the greatest possible exactness, the difference of temperature, I believe it will be found equal to twelve degrees of latitude; that is, it is as hot in Africa at thirty degrees from the equator as at eighteen degrees from the same line in America. The liquor did not mount to so great a height in Peru in the torrid zone as it mounted in France at the greatest heat of the summer. Quebec, although it is in the same latitude almost with Paris, has an incomparably more severe and cold climate than it. The difference between Hudson’s Bay and the Thames, situate both in the same latitude, is equally sensible.”

Although we should grant all this to Mr. de Paw, it would not assist him to demonstrate the malignity of the American climate. Why would he deduce the badness of climate from the excess of cold in the lands of America, and not rather deduce the badness of climate of the old continent from the excess of heat in countries equidistant from the equator? Mr. de Paw can form no argument in this point against America, which the Americans cannot powerfully retort against Europe or against Africa. But all the observations made by him are not sufficient to establish, as a general principle, that the countries of the new world are colder than those of the old continent situated in the same latitude; and still less to make it be believed that there is as much heat in the old continent at thirty degrees of latitude as in the new world at eighteen degrees. Mr. de Paw
says

says (y), that the cold beyond the eightieth degree in the old continent ought to become in November so destructive to men that no mortal could live there; therefore no men should be able to live in America beyond the seventy-seventh degree. How then does he affirm, that in the country of the Esquimeaux there are inhabitants found beyond the seventy-fifth degree of latitude? And if the feeble Americans can subsist in that latitude, we may believe that the hardiest Europeans would be able to bear the cold of the eightieth degree. Farther, if this principle were true, it would be as cold in Jerusalem, situated in little less than thirty-two degrees, as in Vera Cruz, which is situated in little less than twenty degrees; which idea none but Mr. de Paw is capable of entertaining. In like manner other absurd consequences might be deduced, particularly if we were to adopt the calculation of Dr. Michell, who, according to what Dr. Robinson says, concluded, after thirty-three years observation, that the difference between the climate of the old and that of the new world is from fourteen to fifteen degrees, that is, it is as hot in the countries of the old continent at twenty-nine or thirty degrees as in the countries of the new continent, which are at fifteen degrees. It is certain that as there are many countries in America more cold than others of the old continent equidistant from the equator, there are also others more hot. Agra, the capital of Mogul, and the port of Loretto in California, are nearly in the same latitude, and still the heat of that Asiatic city is not comparable to that of the American port. Hue, the capital of CochinChina and Acapulco, are almost equidistant from
the

the equator, and yet the air of Hue is cool in comparison of that of Acapulco. That other proposition of Mr. de Paw is equally false and improbable, namely, that in the centre of the torrid zone the liquor of the thermometer does not rise to so great a height as it does in Paris in the greatest heat of summer. If that was true, the difference between the American and European climates would not be only twelve degrees, as Mr. de P. would make it, but forty-nine, that is as much as the difference of latitude between the centre of the torrid zone and Paris. It is true, that according to the observations made in Quito and compared with those made in Paris, the heat of that equinoctial city never equals that of Paris in the summer; but it is equally certain, that according to the observations made by the same academicians with the same thermometers, in the city of Carthagena, which is not the centre of the torrid zone, but ten degrees from it, that the usual heat of this city is equal to the greatest heat of Paris, agreeably to the testimony of Ulloa, one of the observers (z).

There are many reasons, besides vicinity to or distance from the equator, which make a country hot or cold. The elevation of the soil, the neighbourhood of some lofty mountain covered with snow, abundance of rains, &c. contribute much to the coolness of the atmosphere; and, on the contrary, low ground, scarcity of water, drowths, &c. must increase the heat. *Ciudad Real*, the capital of the diocese of Chiapa, because it is situated on a high ground, is cool; and the city of
Chiapa,

(z) In the year 1735, at Carthagena, the liquor of the thermometer of Reaumur kept at $1025\frac{1}{2}$, without any variation, except that sometimes it fell to 1024 , or rose to 1026 . At Paris, the same year, it never rose higher than $1025\frac{1}{2}$, in the greatest heats of July and August. Ulloa *Relation del Viage a la America Meridional*, part i. tom. I.

Chiapa, of the Indians, at a little distance from it, is extremely hot, because it is situated very low. Chachicomula, a large village, situated at the foot of the very lofty mountain Ozizaba, is cool, but Vera Cruz, placed in the same latitude, is very hot; and what is more, the air of Cividad Real is cool in the latitude of $16\frac{1}{2}$, and that of Loretto, in California, in lat. $25\frac{1}{2}$, is very hot.

The observations made by M. de Paw convince us that the climate of America is not so various as that of Europe; that the inhabitants of the new world are not like those of the greater part of Europe, obliged to endure the alternate extremes of excessive cold, and intolerable heat. The more uniform a climate, the more easily are men familiarized to it, and escape those pernicious effects which follow a vicissitude of seasons. In Quito the thermometer does not rise so high as it does in Paris in the summer; but neither does it fall so low as it does in the temperate climes of Europe in winter. What can be more desirable in a climate than a temperature of air which is equally distant from either extreme, such as that of Quito, and the greater part of Mexico? What climate more sweet and kind to life than that in which the delights of the country are enjoyed all the year, and the earth is continually adorned with herbs and flowers; where the fields are covered with corn, and the trees loaded with fruit; the herds and the flocks spare man his fatigues, and have no need of his provision to maintain them, or his roof to resist the inclemency of the weather; neither snow nor frost compel him to keep near a fire, nor do burning heats in summer check his increase; but constantly experiencing the bounty of nature towards him, he enjoys equally in all seasons the
social

social converse of his fellow-creatures, or the innocent recreations of the country. This is the idea entertained by man of a perfect climate ; and the poets, therefore, when they strove to extol the happiness of certain countries, used to say, that a perpetual spring reigned in them ; as Virgil said of his Italy, (a) and Horace of the Fortunate Isles (b), to which he invited his countrymen. Thus the ancients represented the Elysian fields ; and also in the Holy Writings, in order to convey some idea of the felicity of heavenly Jerufalem, it is said, that there, there is no heat nor cold.

Acosta, whose history is called by M. de Paw an *excellent work*, and who was acquainted with the climes of both continents, and at the same time was not partial to America, nor had any interest in extolling it, treating of the American clime, he speaks thus (c) : “ When I perceived the mildness of the air, and sweetness of the
 “ climate of many countries of America, where it is
 “ not known what thing winter is that contracts, or summer which relaxes with heat ; where a mat is sufficient
 “ for defence from every inclemency of the weather ;
 “ where it is scarcely necessary to alter clothing through
 “ the whole year ; considering, I say, all this, I have
 “ many times thought, and I even think at this moment,
 “ that if men would disengage themselves from the snares
 “ which avarice lays for them, and abandon useless and
 “ vexatious pretensions, they might lead in America a
 “ life of tranquillity and pleasure ; for that which the
 “ poets sing of the Elysian fields, or the famous Tempe,
 “ and

(a) Hic ver assiduum atque albinis mensibus æstas ;

Bis gravida pecudes, bis pomis utilis arbos. Virg. Georg. ii.

(b) Ver ubi longum, tepidasque præbet

Jupiter brumas. Horat. lib. ii. ode 4.

(c) Stor. Nat. e Mor. lib. ii. cap. 14.

“and that which Plato told, or feigned, of his island “Atlantida, are both to be found in those lands, &c.” Other historians speak the same thing as Acoſta of America, and particularly of Mexico and its ſurrounding provinces, the inland countries of which, from the iſthmus of Panama unto the 40th degree of latitude (for thoſe beyond that degree of latitude have not yet been diſcovered), enjoy a mild air, and a climate favourable to life, excepting a few places, which, either by their being low, are moiſt and hot, or by being very high, are rather ſevere in climate. But how many in the old world are not ſevere and noxious?

S E C T. III.

On the Qualities of the Land of Mexico.

IT is certain, ſays Mr. de Paw, that America in general has been, and is at preſent, a very barren country; but it is rather more certain that this is in general a groſs error; and if M. de Paw wiſhes to aſſure himſelf of it, he may obtain information from many Germans, lately come from America, where ſome of them have been for many years, and are at preſent in Auſtria, in Bohemia, in the Palatinate of the Rhine, and even in Pruſſia; or he may re-peruſe that excellent work of Acoſta, and he will find there, in book ii. chap. 14. that if there is any land in the world to which the name of Paradife may be applied, it is that of America. This is the expreſſion of a learned, judicious, and impartial European, born in Spain, one of the beſt countries in Europe; and ſpeaking, in book iii. of the countries of the Mexican empire, he ſays, that New Spain is the beſt country of all thoſe which the ſun ſurrounds. Certainly

Acosta would not speak thus of America in general, and of New Spain in particular, under which name the continent of Spanish North America is comprehended, if America were in general a barren country. Many other Europeans speak not less favourably of America, and particularly of Mexico, whose testimony we must omit, to avoid seeming prolix to our readers (*d*). From the same motive we shall omit also what Mr. de Paw has written against other countries of the new world, as it would be impossible to examine the complaints made by him against each of them, without filling a large volume; we shall therefore confine ourselves to what belongs to Mexico.

Messieurs Buffon and de Paw are persuaded that all the territory of America is composed of inaccessible mountains, impenetrable woods and wastes, watry plains and marshes. Those philosophers have read in the descriptions of America, that the famous Andes, or American Alps, formed two large chains of lofty mountains, covered in part with snow; that the vast desert of the Amazons consists of thick woods; that Guayaquil, and some other places, are moist and marshy; and so much they have thought sufficient to warrant them to say, that America is nothing but mountains, woods and marshes. Mr. de Paw read in the history of Gumilla that which the author says about the method which the Indians of Oroonoko had of preparing the terrible poison of their arrows;

(*d*) Thomas Gages, the oracle of the English and French, with respect to America, speaking of Mexico, says as follows: "Il ne manque rien à Mexique de tout ce qui peut rendre une ville heureuse; et si ces écrivains qui ont employé leurs plumes à louer les provinces de Grenade en Espagne et de Lombardie et de Toscane en Italie dont ils font des paradis terrestres, auroient vu ce nouveau monde et la ville de Mexique, ils se dediroient bientôt de tout ce qu'ils ont dit en faveur de ces lieux là." *Parte i. chap. 22.* Thus does an author who could scarcely speak favourably of any thing, represent Mexico.

arrows ; and in the history of Herrera, or other authors, that the Cannibals, and other barbarous nations, made use of poisoned arrows ; and this was enough for him to say, that the new continent produces a greater number of poisonous herbs than all the rest of the world. He read that neither corn nor the fruits of Europe grow in very hot countries ; and that was sufficient for him to say, that peaches and apricots have only borne fruit in the island of Juan Fernandez (*e*), and that corn and barley have not thriven but in a few countries of the North. Such is the logic adopted by Mr. de Paw through all his work.

But of all that he says against America, nothing holds true with respect to Mexico. There are certainly very lofty mountains in Mexico, eternally covered with snow : there are large woods, and also some marshy places in it ; but the fertile and cultivated soil forms beyond comparison the far greater part of it, as is well known to all those who have visited that country. In all that immense space of land, where wheat, barley, maize, and other kind of grain and pulse with which that country abounds, are sown at present ; they formerly sowed maize, pepper, beans, cacao, chia, cotton, and such like plants, which served for the sustenance, clothing, and luxuries of those people, who having been so numerous as we have already mentioned, and shall elsewhere demonstrate,

(*e*) In order to shew how extremely distant Mr. de Paw is from the truth, we must here observe, that on the miserable island of Juan Fernandez, where he says that peaches ripen well, they on the contrary are small, and very indifferent, according to the information we have had from Abbé D. G. Garcia, who was there seven months, and particularly while the season of fruit lasted. On the other hand, in almost all the temperate and cold countries of Spanish America, where he imagines peaches do not grow, they thrive surprisingly ; and in many places, particularly of Chili, and in some of New Spain, they ripen better than in Europe.

strate, could not have been able to have provided for their necessities, if the country had been nothing but mountain, wood, and marsh. Mr. de Buffon, who in his first vol. says, that America is nothing but a continued marsh, and in vol. v. affirms, that the inaccessible mountains of America scarcely leave any small spaces for agriculture, and the habitation of men, in the same vol. v. confesses that the people of Mexico and Peru were very numerous. But if those people who occupied a very large part of America were very numerous, and lived as he says in societies, and under the control of laws, America is certainly not a continued marsh: if those people supported themselves, as is certain they did, on corn and fruits which they cultivated, the spaces are not small which the mountains leave for agriculture, and the habitation of men.

The multitude, variety and excellence of the plants of Mexico, leave us in no doubt of the very singular fertility of its lands. The pasture grounds, says Acoſta, of New Spain are excellent, and breed accordingly an innumerable quantity of horses, cows, sheep, and other animals. It is also as abundant in fruit as in any kind of grain. In short, there is no grain, pulse, kitchen-herbs, or fruit, which does not thrive in that soil. The wheat, which Mr. de Paw scarcely allows to some countries of the North, does not grow in general in the hot lands of New Spain, as it does not in the greater part of Africa, and many other parts of the old continent; but in the cool and temperate lands of that kingdom it thrives well, and is more abundant than it is in Europe.

It is sufficient to say, that the quantity gathered in the diocess of Angelopoli is so great, that with what remained, after all its numerous inhabitants were provided, they

they supplied the Antilles, and the fleet of ships which formerly came to Havanna, under the name of *Armata de Barlovento*. In Europe there is but one seed-time, and one harvest. In New Spain there are several. "In those lands," says the European author Torquemada, who was there many years, and travelled through the whole kingdom, "where they cultivate wheat, in every season of the year may be seen one crop reaping, another ripening, another still green, and another sowing," which plainly demonstrates the wonderful fertility of the soil. The same author makes mention of several lands which yielded seventy, eighty, or an hundred for one; and as great a multiplication of wheat has been seen in some fields of those countries by us (*f*); which, speaking in general, is certainly greater than that of Europe, and with less cultivation, as is well known to European superintendants of agriculture who have been in that part of America. What we say of wheat we can also say of barley, although this is not sown but in proportion to the consumption there is made of it, in the support of horses, mules, and hogs. We might say still more of maize, which is the grain peculiarly native to America.

Mr. de Paw pretends that all the plants of Europe have degenerated in America, except aquatic and juicy plants; and to prove this absurd notion, he says that peaches and apricots have borne fruit in the island of
Juan

(*f*) We have been in a country of America, where the land yielded commonly fifty for one, and sometimes an hundred for one. In Cinaloa, although it is a cold country, the land, we have been credibly informed, yields two hundred for one. Our learned friend, the Abbé Molina in his History of Chili, says, that the land of that kingdom usually yields an hundred and fifty for one. The plenty of grain is so great, that it is sold at five paoli the *fanega*, and every year about thirty vessels loaded with it come to Peru.

Juan Fernandez only. Although we should grant that those fruits grow in no country of America, it would not avail him to prove what he intends to prove, but even this particular is as false as his general proposition. Acofta, treating of those fruits in particular, says, "Peaches, quinces, and apricots grow well in America, but best in New Spain (g)." In all New Spain, except the hot countries, those fruits, and all others transplanted from Europe, have thriven and grow in abundance (b). "Lastly," says Acofta, speaking of America in general, "almost every thing good which is produced in Spain grows there, sometimes better, and sometimes not; wheat, barley, fallads, kitchen-herbs, pulfe, &c." (i) If he had spoken only of New Spain, he would have omitted that *almost*.

"There is also another advantage," says Acofta, "which is, that the things of Europe are better in America than those of America are in Europe." But this may appear but a small advantage to Mr. de Paw. It alone would be sufficient however to demonstrate that, if there is any preference, it is to be given to America, In New Spain, many European authors attest, and all who have been there know, that wheat, barley, and every grain of Europe; peas, beans, and every other pulfe; lettuces, cabbages, turnips, asparagus, and other fallads and roots, and every sort of kitchen herbs; peaches,

(g) Acofta, lib. iv. cap. 31. Peaches are so plentiful in New Spain, that they are sold by twenties; and for the smallest currency there, two, three, or four twenties are given. In the kingdom of Chili, they count twelve different species of peaches, some of which are so large as to weigh a pound Spanish, or sixteen ounces. Molina Stor. del Chili.

(b) Pears are also sold in twenties at Mexico; and there are upwards of fifty species of them.

(i) Acofta, lib. iv. cap. 31.

peaches, apples, pears, quinces, and other fruits ; carnations, roses, violets, jessamines, sweet-basil, mint, marjoram, balm gentle, and other flowers and odorous plants brought from Europe all prosper there : but in Europe the plants of America do not, nor can in general come to perfection. Wheat grows in the lands of Europe, but much smaller, and not so good as that of America. Of the many delicious fruits of the new world, some, such as the musa and ananas, have thriven in the gardens of the princes of Europe, by means of hot-houses, and great care and attention, but not so well flavoured, or in such abundance, as in their native climes. Others still more valuable than these, such as the chirimoya, the mamey, and chicozapote have not yet, as far as we know, been made to grow, notwithstanding the studied efforts of European industry for that purpose. The cause of this great difference between America and Europe is that which Acoſta mentions : that in America there is a greater variety of climate than in Europe ; from whence it is more easy to give each plant a temperature proper for it. As it is not an argument of the sterility of Europe, that the plants proper to America do not thrive in it, neither is it an argument of the sterility of some countries of America, that some plants of Europe do not thrive in them ; because *non omnia fert omnis tellus. Hic segetes ibi proveniunt felicius uvæ.* On the contrary, the hot countries in which wheat and European fruits do not ripen, are yet the most pleasant and fruitful.

We do not doubt that if a comparison is made of America with the old continent, they will be found equal in their productions : for Asia and Africa have lands and climes suited to all the plants of America, which, on
account

account of the differences of their nature, could not succeed in Europe. But what advantage is it to Europeans that Asia has abundance while it is at so great a distance? On the contrary, the Mexicans being surrounded by countries of every sort of climate, enjoy all their different fruits. The market of Mexico, like that of many other cities of America, is the emporium of all the gifts of nature. There we find apples, peaches, apricots, pears, grapes, cherries, *camotes*, *xicames*, and other numerous fruits, roots, and savory herbs, which cool and temperate climes yield; ananas, musas, cocoas, anonas, chirimoyas, mameys, chicozapotes, zapotes, and many others which hot countries produce; melons, cucumbers, oranges, pomegranates, and others which cold or hot countries equally produce. At all seasons of the year their market is abundantly provided with variety of excellent fruits, even at those times when the Europeans must content themselves with their chestnuts, or at most with apples and grapes, which their industry has preserved. Through all the year, even in the severity of winter, vessels enter their market by one of the innumerable canals of the city, loaded with such variety of fruits, flowers, and herbs, that it seems as if all the seasons of the year offered their productions at once; the most valuable plants of Europe, as well as all the native productions of Mexico being collected there; which all Europeans who have visited that part can testify.

Nor is that land less abundant in plants of medicinal nature. To be satisfied of this truth, it will be sufficient to look into the work of the celebrated naturalist Hernandez; in which nine hundred plants, that are for the most part produced in the neighbourhood of Mexico, are described and designed, whose virtues have been ascertained

certained by experience ; besides three hundred others, the uses of which are not mentioned ; and without doubt there are innumerable others yet undiscovered. Mr. de Paw, on the contrary, says that America produces a greater number of poisonous plants than all the rest of the world. But what does he know of the plants which are bred in the inland countries of Africa and Asia, to enable him to make a comparison ? The soil of America is so fertile, that it is not to be wondered at if there is abundance of every sort in it. But to mention the truth, we do not know that one twentieth part of those poisonous plants which are produced in the old continent have been discovered in New Spain.

With respect to gums, resins, oils, and other juices which the trees yield either spontaneously or with the aid of human industry, New Spain, says Acosta, excels : there are whole woods of acacia, which yields the true Arabian gum ; but from its plenty it is not sufficiently valued. There is besides balsam, incense, copal of many species, liquid amber, tecamaca, oil of fir, and many other juices valuable for their fragrant odours, and medicinal virtues.

Even those very woods with which the land of America is covered, as Buffon and de Paw affirm, demonstrate its fertility. There have been, and there are still, in these most extensive regions, great woods ; but there are not so many as that a journey of five or six hundred miles may not be made without meeting one of them. And what kind of woods are they ? for the most part consisting of fruit-bearing trees, such as the musa, mamey, apple, orange, and lemon, in the woods of Coatzacualco, Misteca, and Michuacan ; or of trees valuable for their wood or their gums, such as those

which separate the vale of Mexico from the diocess of Angelopoli, and those of Chiapa, of the Zapotecas, &c. besides pines, oaks, alhes, hazels, firs, and a great many others, common to both continents. The trees peculiar to that land are in still greater number, and of more value. There are whole woods of cedar, as we have already mentioned. The conqueror Cortes was accused by his rivals before Charles V. of having used for the palace which he made be built in Mexico, seven thousand beams of cedar; and he excused himself by saying that it was a common wood in that country. It is in fact so very common, that they make the stakes for the foundation of houses in the marshy places of the capital, of this wood. There are also woods of ebony, that so justly celebrated tree, in Chiapa, Yucatan, and Cozumel; of brasil wood in hot countries, and the odorous wood of aloes in Misteca. The *Tapincoren*, the *Granadillo* or red ebony, the *Camote*, and others which we have mentioned in our history, afford better timber than is to be had in Europe. Lastly, to avoid a tedious enumeration, we refer the reader to Acosta, Hernandez, Ximenes, and other European authors who have been in New Spain, although all they say is not sufficient to convey a competent idea of the fertility of that land. Acosta affirms, that “as well in respect to number as “to variety of trees produced by nature, there is a “greater abundance in America than in Asia, Africa, “and Europe (*k*).”

The nature and quality of a soil is best discovered by the plants which it spontaneously produces without the assistance of art. Let us compare, then, the productions of Europe with those, not of America, but only
of

(*k*) Acosta, lib. iv. cap. 30.

of New Spain. "The reason of there being so many savages in America," says Montesquieu (*l*), "is that the land there produces of itself many fruits on which they can feed." I believe that those advantages would not be obtained in Europe if the land were left to itself without culture; it would produce nothing but woods of oaks and other useless trees. "Examining," says M. de Paw, "the history and origin of our plants, our kitchen-herbs, our fruit-trees, and also our grains, we find they are all foreign, and have been transplanted from other climes to our own. We can easily imagine the misery of the ancient Gauls, and even that of the Germans, in whose land no fruit-trees were produced in the time of Tacitus. If Germany was to restore the foreign vegetables which are not originals of its soil or climate, almost none would remain, nor would it preserve among its seeds which serve for nourishment any but the wild poppy and the wild *Vena* (*m*). What Mr. de Paw openly confesses respecting Germany and Gaul, might also be said of the other countries of Europe, and also of Greece and Italy, which supplied the others. If Italy was obliged to restore all those fruits which do not belong originally to its soil, what would remain but acorns? These terms, (*malum Persicum, malum Medicum, Assyrium, Punicum, Cidonium, nux Pontica, &c.*) serve to keep us in remembrance that those fruits came from Asia and from Africa. "It is known," says Mr. Busching (*n*), "that the best and most beautiful fruits passed from Italy into those countries which produce them at present. Italy received them from Greece, from Asia, and from Africa. Apples

(*l*) Montesquieu L'Esprit des Loix, lib. xviii. chap. 9.

(*m*) Recherch. Philosoph. part i.

(*n*) Busching Geograph. tom. i.

“ples came to her from Egypt and Greece; apricots
 “from Epirus; the pear from Alexandria, Numidia, and
 “Greece; the lemon and orange from Medea, Assy-
 “ria, and Persia; the fig from Asia; the pomegranate
 “from Carthage; the chesnut from Catania in Magne-
 “fia, a province of Macedonia; almonds from Asia to
 “Greece, and thence to Italy; the walnut from Persia;
 “filberts from Ponto; olives from Cyprus; plums from
 “Armenia; the peach from Persia; quinces from Ci-
 “donia in Candia to Greece, and thence to Italy.”

Pliny says, that men at first fed upon nothing but acorns (*o*). This, though false with respect to men in general, appears to be true with respect to the first peoplers of Italy, at least such was the opinion of the ancients, as their writings shew. Pliny adds, that even in his time many people, from the want of grain, were esteemed rich in proportion to the quantity of acorns which they had, of the flour of which they made bread, as they do at present in Norway of the bark of the pine, and in other northern countries of bones of fishes; which is no small indication of their misery. Bomare declares that all the beauties of European gardens are foreign (*p*), and that the most beautiful flowers they have come from the East (*q*). Mr. de Paw makes a more general confession of the ancient misery of the Europeans, where he affirms that the useful plants which they have at present passed from the south of Asia into Egypt, from Egypt to Greece, from Greece into Italy, from Italy into Gaul, and from thence into Germany (*r*); so that the soil of Europe, with respect to native and original

(*o*) Plin. Hist. Nat. lib. ii. 2. cap. 56.

(*p*) Bomare Diction. Univ. d'Histoire Nat. V. Plante.

(*q*) Id. V. Fleur.

(*r*) Recherch. Philosoph. part i.

original productions, is one of the poorest and most barren in the world. On the contrary, how fruitful and abundant the American soil is, and especially that of Mexico, in native plants proper for nourishment and clothing, and the other necessities of life, may be learned from reading the European authors who have written of the natural history of that new world.

This is the answer to that ridiculous comparison which Herrera makes in his first Decad mentioned in the beginning of this dissertation. "In America," he says, "there were not, as in Europe, either lemons, oranges, pomegranates, figs, quinces, melons, grapes, olives, sugar, rice, or wheat." The Americans will then say, first, that Europe had none of those fruits until they were transplanted there from Asia and Africa; secondly, that at present these fruits grow in America as well as in Europe, and in general better of their kind and in greater plenty, particularly oranges, lemons, melons, and sugar canes; thirdly, that if America had not wheat, Europe had not maize, which is not less useful or wholesome; if America had not pomegranates, lemons, &c. it has them now: but Europe never had, has, nor can have, chirimoyas, ahucates, musas, chicozapotes, &c.

Finally, Mr. de Buffon, and Mr. de Paw, and other European philosophers and historians, who inveigh so much against America for its barrenness, its woods, its marshes, and deserts, will please to remember, that the miserable countries of Lapland, Norway, Iceland, Nova Zembla, Spitzbergen, and the vast horrid deserts of Siberia, Tartary, Arabia, Africa, and others, are countries of the old continent, and make at least the fourth part of its extent. Yet what countries are those? Let us attend to the eloquent description which Buffon gives of

of the deserts of Arabia: “ a country, he says, without verdure, and without water; a sun always burning, an atmosphere always dry, sandy plains, mountains still more parched, over which the eye roams in vain to fix upon a single living object; a land, if we may say so, pale and excoriated with the winds, which presents nothing to the sight but bones, scattered stones, and rocks in pyramids or in ruins; a desert entirely bare, in which the adventurous traveller never bates under the shade, where there is nothing that can be made companionable to him, or preserve his remembrance of living nature: a solitude greatly more frightful than that of the woods; for the trees are at least animated substances, which afford some consolation to man, but here he finds himself alone, detached, more naked and more bewildered, in places that are waste and without boundary; all the soil which he views appears to him like his sepulchre; the light of the day, more melancholy than the shades of night, does not return but to make him see his nakedness and impotence, and set before him his horrible situation, lengthening to his sight the limits of the void, and enlarging around him the abyss of immensity which separate him from the habitable world; a space so immeasurable, that in vain he would attempt to pass it; for hunger, thirst, and burning heat, shorten the moments which remain to him between desperation and death (s).”

DISSERTATION

(s) Buffon Hist. Nat. tom. xxii.

DISSERTATION IV.

Of the Animals of Mexico.

ONE of the arguments most insisted on by Buffon and de Paw, to illustrate the unhappy nature of the American soil, and the malignity of its clime, is the pretended degeneracy of animals, both of those which are native to that land, and those which have been transported there from the ancient continent. In the present Dissertation we shall examine their proofs, and detect some of their errors and contradictions.

S E C T. I.

Of the Animals proper to Mexico.

ALL the animals which are found in the new, have passed there from the old world, as we have established in the first Dissertation ; and it is confessed also by Mr. Buffon himself, in the twenty-ninth volume of his Natural History ; and it ought likewise to be credited, if we rely on the authority of the sacred writings in this point. We call those animals proper to Mexico which were found there by the Spaniards ; not because they draw their origin from that land, as we are given to understand by Mr. de Paw in all his work, and by Mr. Buffon in the first twenty-eight volumes of his History ; but only to distinguish those animals which, from time immemorial, were bred in those countries, from those others which were afterwards transported there from Europe : we shall therefore call the latter *European*, the former *American*.

The

The first ground of disparagement to America, with the count de Buffon, is the small number of its quadrupeds, compared with those of the old continent. He reckons two hundred species of quadrupeds hitherto discovered over all the globe, of which one hundred and thirty belong to the old continent, and only seventy to the new world. And if we take from this number the species which are common to both continents, we shall hardly find, he says, forty species of quadrupeds properly American. From these premises he infers that in America there has been a great scarcity of matter (*a*).

But why would he take from the seventy species of quadrupeds America has, those thirty which are common to both continents, as they, from their very ancient habitation in those countries, are as much American as the others? Besides, if those animals, which he calls properly American, had been created originally in America, with greater shew of probability he might have affirmed the supposed scarcity of matter in that part of the world. But all beasts having been Asiatic in their origin, as he himself confesses, we do not see his grounds for drawing such a conclusion. "Every animal," says Buffon, "when abandoned to its own instinct, seeks a zone and a region adapted to its nature (*b*)."
Hence the cause of the small number of species of quadrupeds in America; because, upon supposition that animals after the deluge, when abandoned to their own instinct, sought a zone and a region suitable to their natures, and found it in the countries of the old continent, they had no occasion to make so long a journey as to America: if the animals, instead of being saved on the mountains of Armenia,

(*a*) Hist. Nat. tom. **xxiii**.

(*b*) Ibid. tom. **xxix**.

Armenia, had been collected on the American Alps, by the same way of reasoning the number of species of quadrupeds in the old continent would have been less, and the American philosopher would have been liable to censure, who, from such an incident, would have endeavoured to infer the prodigious scarcity of matter, and barren niggard sky of that which we call the old continent.

But although all those quadrupeds were actually original in America, we ought not from thence to infer the supposed scarcity of matter, because a country cannot be said to have a scarcity of matter which has the number of species of its quadrupeds proportioned to its extent. The extent of America is the third part of the whole earth, therefore it cannot be said that there is a scarcity of matter there, when it has a third part of all the species of quadrupeds. The species of quadrupeds, according to Buffon, are two hundred, of which America has seventy, which is something more than a third; it cannot therefore be said that there is a scarcity of matter there.

Hitherto we have reasoned on the supposition that what Mr. Buffon has said was true with respect to the number of species of quadrupeds; but who is certain of this, as the real distinguishing character of species has not yet been discovered? Mr. Buffon, as well as several other naturalists who have written after him, believe, that the sole indubitable proof of the specific difference of two animals, similar to each other in many circumstances and properties is, that of the male not being able to cover the female, and of producing by means of generation another individual that is fruitful and similar to themselves. But this proof of diversity of species, besides that it fails in some animals, is, with respect to others, very difficult to be determined. To shew the

uncertainty of it, let us put an afs and a mare together, and a mastiff and a greyhound together, two breeds of dogs extremely different. From this last couple is bred a dog, which partakes of mastiff and greyhound; from the first is produced a mule, which partakes also of the afs and the mare. I wish to know why the afs and the mare are two different species of quadrupeds, and the mastiff and the greyhound are only varieties of one species. Because this last couple, says Buffon, generates a fruitful individual, the other not. But how? Mr. Buffon, in the twenty-ninth volume of his History, freely affirms, that the mules not being able to conceive is not because they are absolutely impotent, but only on account of the excessive heat and extraordinary convulsions which they suffer in coition. Mr. Bomare (c), after having cited the testimony of Aristotle, who reports, in his History of Animals, that in his time the mules of Syria springing from horses and asses, produced young mules similar to themselves, adds, "This fact, related by a philosopher so worthy of faith, proves that mules are animals specifically fruitful in themselves, and in their posterity." Similar cases, shewing the fruitfulness of mules, are to be found attested by many authors, ancient as well as modern, worthy of credit; and some cases have happened of this kind in our own time in Mexico (d). There is no other dissimilarity therefore between those two pair of quadrupeds, except that the births of the bitches generated by that couple of dogs are more frequent than those of the mules.

Besides

(c) Diction. d' Histoire Nat. V. Mulet.

(d) Amongst others worthy of mention are the repeated births of a mule got by an afs and a mare, on the farm called *Foreß of Zurita*, near to the city of Lagos, the property of D. F. G. Rubalcaba. This mule conceived by an afs, and brought forth a mule in 1762, and another in 1763.

Besides, who has informed Mr. Buffon, that the *Gibbon* and *Magoto*, the *Mammon* and *Pappion* (four sorts of apes), do not copulate together, and produce a fruitful individual? The author has not made any experiment of it, nor cited any other naturalist who had; and notwithstanding he decides that all the above mentioned quadrupeds are so many different species. The distinction of the species of quadrupeds adopted by him is therefore very doubtful and uncertain, and we cannot know whether certain quadrupeds, which he reckons different species, are not one single species; and on the contrary, if others which he believes to be one species, may not be specifically different.

But leaving this aside, it would be sufficient to cause a great diffidence of the division which Mr. Buffon has made of quadrupeds, to perceive the contradictions which appear in this and the other parts of his history, though in other respects it is extremely valuable. In the discourse which he gives in the twenty-ninth volume, on the Degeneracy of Animals, he affirms, that if we are to enumerate the quadrupeds proper to the new continent, we shall find fifty different species; and in the enumeration which he makes of the quadrupeds of both continents, he says, that those of America hardly make forty species. In the above enumeration he reckons the tame goat, the shamois goat, and wild goat, three different species; and in vol. xxiv. treating of those animals, he says, that those three quadrupeds, and the other six or seven species of goats, which are distinguished by different names, are all of one and the same species. So that we ought to abate the eight or nine species from the one hundred and thirty which he numbers in the old continent. In the above mentioned enumeration he counts

counts the dog, the mouse, and marmotte ; and adds, that no one of those quadrupeds was in America ; but treating afterwards of the animals common to both continents, he says, that the marmots and mice are common to each continent, although it is difficult to decide if such American quadrupeds are of the same species with those of the old continent ; and in vol. xvi. he affirms, that mice were carried to America in European vessels. With respect to dogs, which, in the above enumeration, he denies to America, he grants them to it in vol. xxx. for he affirms that the *Xoloitzcuintli*, the *Itzcuintepotzotli*, and *Techichi*, were three different breeds of the same species of dogs with those of the old continent. This sketch is sufficient to shew that Mr. Buffon, notwithstanding his great genius and great diligence, sometimes forgets what he has written.

Among the one hundred and thirty species of quadrupeds of the old continent, he enumerates seven species of bats common in France and other countries of Europe, five of which, that were hitherto unknown and confounded with others, were lately discovered and distinguished by Mr. Daubenton, as he affirms in vol. xvi of his History. If then in learned France, where so many centuries have been passed in the study of natural history, five species of bats were hitherto unknown, what wonder is it that in the vast regions of America, where no such able naturalists have gone yet, and where but lately that study has been in esteem, should remain many species of quadrupeds still unknown ? We do not doubt that if there had been some Buffons and Daubentons in the new world, they would have been able to have counted a few more quadrupeds than he numbers from Paris, where he cannot be informed respecting
American

American animals, as he is about those which are European. We feel extreme regret that a philosopher so celebrated, so ingenious, so learned, and so eloquent, who has endeavoured to write of all the quadrupeds of the world, distinguishes their species, families, and breeds, describes their character, disposition, and manners, numbers their teeth, and even measures their tails, should at the same time shew himself ignorant of the most common animals of Mexico. What quadruped is more common or more known in Mexico than the *coyote*? All the historians of that kingdom make mention of it, and Hernandez gives an exact and minute description of it in his History; which is most frequently cited by Buffon; yet this author makes not the least mention of it under that or any other name (*e*). Who does not know that the rabbit was a quadruped excessively common in the provinces of the Mexican empire, under the name of *Tochtli*? That the figure of it was one of the four characters of the Mexican years, and that the hair of its belly was woven into waistcoats for the use of the nobles in winter? Notwithstanding Mr. Buffon will make the rabbit one of those quadrupeds which were transported from Europe to America; but, among all the European historians of Mexico, we have not found one who thinks so; on the contrary, all suppose, that it has from time immemorial inhabited those countries, and we do not doubt that the Mexicans, as often as they read this singular anecdote, must smile at the count de Buffon.

Hernandez

(*e*) The animals of the old continent, which most resemble the Cojote, are the *Chacal*, the *Adive*, and the *Ifatis*; but it is different from them. The *Chacal* is of the size of a fox, the Cojote is twice as large. The *Chacals* go always in herds of thirty or forty together; the Cojotes, in general, alone. The *Adive* is still smaller and weaker than the *Chacal*. The *Ifatis* is peculiar to the frigid zone, and shuns the woods; but the Cojote loves the woods, and inhabits warm and temperate countries.

Hernandez enumerates, in his history of Quadrupeds, four Mexican animals of the class of dogs, mentioned by us in book I. of this history : the first, the *Xoloitzcuintli*, or hairy dog ; the second, the *Itzcuintepozotli*, or hunch-back dog ; the third, the *Techichi*, or eatable little dog ; and the fourth, the *Tepeitzcuintli*, or little mountain dog. These four very different species of dogs have been reduced by the count de Buffon to one single species. He says, that Hernandez was deceived in what he wrote of the *Xoloitzcuintli*, for no other author makes mention of it, and therefore it ought to be believed that that quadruped was transported there from Europe, since Hernandez himself affirms, that he saw it first in Spain, and that it had no name in Mexico, as *Xoloitzcuintli* is the proper name of the wolf, given by Hernandez to that other quadruped ; that all those dogs were known in Mexico by the generic name of *Alco*. Here, in a few words, we have a mass of errors. The name *Alco*, or *Allco*, neither is Mexican, nor ever was used in Mexico, but in South America. That of *Xoloitzcuintli* is not the name of the wolf, nor do we know that it was ever called so by any one at Mexico. The Mexicans call the wolf *Cuetlachtli*, and in some places where they do not speak Mexican properly, they call it *Tecuani*, which is a generic name for wild beasts. It is evident besides, from the very text of Hernandez, which we here subjoin (*f*), that neither the *Xoloitzcuintli* was transported from Europe to Mexico, nor was such a name given to it by Hernandez

(*f*) Præter canes notos nostro orbi qui omnes pene ab Hispanis translati ad Indos in his plagis hodie educantur, dua alia offendas genera, quorum primum antequam huc me conferrem, vidi in Patria, cæteros vero neque conspexeram neque adhuc eo delatos puto. Primus *Xoloitzcuintli* vocatus alios corporis vincit magnitudine, &c. Hern. Hist. Quadrup. N. Hisp. cap. 20.

Hernandez, but that it was the name by which the Mexicans themselves used to call it. Hernandez had seen that quadruped in Spain, because it had been transported there from Mexico, as he mentions himself, where he had also seen in the gardens of Philip II. several Mexican plants. But why has no other author made mention of the *Xoloitzcuintli* ? because neither before nor since his time has any one undertaken to write a history of Mexican quadrupeds ; and the historians of that kingdom have been contented to mention some of the commonest animals. Moreover every wise and impartial person should necessarily give more credit to Hernandez in the Natural History of Mexico, as he employed himself in it so many years by order of king Philip II. and as he observed with his own eyes the animals of Mexico, of which he wrote and informed himself from the speech of the Mexicans themselves, whose language he learned, than to the count de Buffon, who, although more ingenious and more eloquent, had no other lights concerning Mexican animals than those which he procured from the works of Hernandez, or from the relations of some other author, not so deserving of credit as that learned and skilful naturalist.

The count de Buffon would make the *Tepeitzcuintli* of Hernandez, the glutton, a quadruped which is common in the northern countries of both continents ; but whoever will compare the description which the count de Buffon makes of the glutton with that which Hernandez gives of the *Tepeitzcuintli*, will immediately discern the most striking difference between those two quadrupeds (*g*). The glutton is, according to the count de Buffon,

(*g*) Buffon, Hist. Nat. tom. xxvii. Hernandez, Hist. Quadrup. N. Hisp. cap. xxi.

Buffon, a native of the cold countries of the North, the tepeitzcuintli, of the torrid zone ; the glutton is, according to count de Buffon, twice as large as the badger. The tepeitzcuintli is, as Hernandez says, *parvi canis magnitudine*. The glutton is so named on account of its incredible and dreadful voracity, which even impels it to dig up dead carcases to eat them ; Hernandez says nothing of any such quality in the tepeitzcuintli, and he certainly would not have omitted what constitutes its chief character : on the contrary, he affirms that the tepeitzcuintli becomes domestic, and feeds upon the yolks of eggs and bread soaked in hot water ; but a beast so carnivorous as the glutton could never support itself on such diet. In short, to omit other arguments of their diversity, the skin of the glutton is, as count de Buffon says, as valuable as that of the zibelline (*b*) ; but we do not know that the skin of the tepeitzcuintli was ever esteemed or made use of.

The xoloitzcuintli therefore being different from the wolf and the tepeitzcuintli from the glutton, and those four American quadrupeds of the class of dogs, being very different from each other in size, in disposition, and many other remarkable circumstances, notwithstanding that they couple together, and can procreate a third individual, which is fruitful, we ought to conclude that they are four different species ; and therefore these three species, which count de Buffon has unjustly taken from America, ought to be restored to it.

We should never finish if we were to mention all the mistakes of this author respecting American quadrupeds ; but merely to shew that the number of seventy species
ascribed

(*b*) Bomare says, that the skin of the glutton is more valued by the people of Kamtschatka than the zibelline ; and that in Sweden it is much in demand, and very dear.

ascribed by him to America is not just, but different, and even contrary to what he has written in the course of his History, we shall subjoin to this dissertation a list of American quadrupeds taken from that history, to which we shall add the quadrupeds which he confounds with others which are different, and those which he has entirely omitted ; from which it will appear how far he has been from the truth, in saying that in America there has been a prodigious scarcity of matter. For in order to determine such a scarcity, it is not enough to know that the species are few in number, but it would be necessary also to demonstrate that the individuals of such species are also few in number ; for if the individuals of the seventy species of American quadrupeds are more numerous than those of the one hundred and thirty species of the old continent, although the nature of them were less various, still it would not prove a greater scarcity of matter. It would be necessary, besides, to demonstrate, that the species of reptiles and birds are fewer, and also the individuals less numerous, as both of these serve to shew the abundance or scarcity of matter ; but no one is so ignorant of the country of America, as to need to be informed of the incredible variety and surprising number of American birds. We should wish to know why nature, which has been so niggardly of quadrupeds to America, as count de Buffon and Mr. de Paw report, has been so prodigal of birds ?

These authors, not contented with diminishing the species of American quadrupeds, attempt also to lessen their stature : “ All the animals of America,” says count de Buffon (i), “ both those which have been

VOL. III.

D d

“ transf-

(i) Hist. Nat. tom. xviii.

“ transported by man, such as horses, asses, bulls, sheep,
 “ goats, hogs, dogs, &c. and those which passed there
 “ by themselves, such as wolves, foxes, deer, and al-
 “ cos, are considerably smaller in size than they are in
 “ Europe :” and this, he adds, is the case *without any*
exception. This astonishing effect he ascribes to the nig-
 gard sky of America, to the combination of the elements,
 and other natural causes. “ There was not,” says Mr.
 “ de Paw, “ one large animal under the torrid zone of
 “ the old continent. The largest quadruped amongst
 “ the natives of that country which exists at present in
 “ the new world between the tropics, is the tapir,
 “ which is about the size of a calf (*k*).” “ The most
 “ corpulent beast of the new continent,” says count de
 Buffon, “ is the tapir, which is about the size of a small
 “ mule ; and next to it the cabiai, which is about the
 “ size of a middling hog.”

We have already demonstrated, in the preceding Dis-
 sertation, that although we should grant to those philoso-
 phers the supposed smallness of American quadrupeds,
 nothing could from thence be concluded against the land
 or climate of America : as according to the principles
 established by Mr. de Buffon already quoted by us,
 the larger kind of animals are peculiar to intemperate
 climes, and the smaller kind to climes which are mild
 and temperate ; and if the advantages of climate are to
 be deduced from the size of quadrupeds, we would un-
 questionably say, that the climate of Africa and the south
 of Asia is much better than that of Europe. But if in
 America, when it was first discovered by the Europeans,
 there were no elephants, rhinoceroses, sea-horses, ca-
 mels, &c. they were however once there, if we give
 credit

(*k*) Recherch. Philosoph. part iii. sect. 2.

credit to de Paw, Sloane, Du Pratz, Lignay, and several other authors, who affirm the ancient existence of these great quadrupeds in America, founded on the discovery of bones, and entire skeletons of immense size, which were dug up in different places of the new world; likewise, if we believe what count de Buffon has written in the eighteenth volume of his History, there was formerly an animal seven times larger than the elephant, called by Mr. Muller the *Mammout* (l); but in Europe there never was, nor can there be, any quadruped of such a size. There were no horses, asses, or bulls (m) in America until they were transported there from Europe; but neither were these in Europe until they were transported there, or brought from Asia. All animals drew their origin from Asia, and thence spread through other countries; the neighbourhood of Europe, and the commerce of the Asiatics with the Europeans, facilitated the passage of these animals into Europe; and with these also were introduced there some customs and inventions useful to life, of which the Americans were deprived,

(l) According to the account given by Muller of this quadruped, it should be one hundred and thirty-three feet in length, and one hundred and five in height. The count de Buffon speaks thus of it in volume xvi. "The monstrous *mammout*, whose enormous bones we have frequently considered, and which we have conceived to be at least six times larger than those of the biggest elephant, exists no more." In volume xxii. he says, that he is assured that those immense bones have belonged to elephants seven or eight times larger than the one whose skeleton he had examined in the royal museum of Paris: but in his new work entitled *Epoches de la Nature*, he again affirms the former existence of that enormous quadruped in America.

(m) When we say there were no bulls in America, we allude only to the common species employed in agriculture; for there were *bifontes*; which the count de Buffon sometimes thinks to be the common species; at other times he is doubtful of it.

prived, on account of their distance from those countries, and the want of commerce.

When count de Buffon affirmed, that the largest quadruped of the new world was the tapir, and the next the cabiai, he had entirely lost memory of the morse, sea-calves, bufflers, rein-deer, alcos, bears, and others. He himself confesses (*n*) that the sea-calf seen by Lord Anson and Rogers in America, and by them called the sea-lion, was incomparably larger than all the sea-calves of the old world. Who would compare the cabiai, which is not larger than a middling hog, with the bufflers and alcos? The bufflers are equal in general to the common bulls of Europe, and often exceed them in size. Let us attend to the description which Bomare makes of one of these quadrupeds transported from Louisiana to France, and measured exactly by that naturalist at Paris, in the year 1769 (*o*). There was an immense multitude of these large quadrupeds in the temperate zone of North America. The alcos of New Mexico are of the size of a horse. There was a gentleman in the city of Zacatecas, who made use of them for his chariot instead of horses, according to the testimony of Betancourt; and sometimes they have been sent as presents to the king of Spain.

The universal position of the count de Buffon, that all the quadrupeds common to both continents are smaller in America *without any exception*, has been proved false
by

(*n*) Hist. Nat. tom. xxvii.

(*o*) Diction. d'Hist. Nat. V. Bison. Bomare calls that American animal on account of its great size the colossal quadruped; he says that its length from its snout to the beginning of its tail measured by its flanks was nine feet and two inches; its height from the summit of its back to its hoof, five feet and four inches; its thickness measured over the hunch of its back ten feet in circumference. He adds that he understood from the owner of that animal, that the females were still larger.

by several European authors who have seen these animals; and even by count de Buffon himself, in other places of his History. Dr. Hernandez says of the *mexzli*, or American lion, that it is larger than the lion of the same species of the old continent. Of the tyger he affirms the same (*p*). Neither the count de Buffon, nor Mr. de Paw have a just idea of this wild animal. We saw one a few hours after it was killed by nine shots: but it was much larger in size than we are made to believe by Mr. Buffon. Those authors, since they do not trust the accounts of Spaniards, ought at least to give credit to Mr. Condamine, the learned and impartial French author, who says that the tygers seen by him in the hot countries of the new world did not appear to him to differ from the African tygers, either in the beauty of their colours, or in their size. Of the Mexican wolf Hernandez says, that in figure, colour, and disposition, as well as in size it resembles the European wolf, except that it has a larger head (*q*). The same thing he affirms of the common deer, and Oviedo also of both the common and other deer. The count de Buffon, notwithstanding the universality of the position which he has laid down *without any exception*, concerning the smaller size of American quadrupeds, treating, in volume xxix. of the degeneracy of animals, he says, that deer are among the quadrupeds common to both continents those alone which are more large and strong in the new than they are in the old world; and speaking, in volume xvii. of the *lodra* of Canada, he confesses that they are larger than those

(*p*) *Vulgaris est huic orbi tygris, sed nostrate major. Hist. Quad. N. Hisp. cap. x.*

(*q*) *Forma, colore, moribus, ac mole corporis Lupo Nostrati similis est Cuetaachtli, atque adeo ejus, ut mihi videtur, speciei, sed ampliore capiti. Ibid. cap. xxxiii.*

those of Europe ; and the same thing he says of the American beaver : although he allowed no exception to his principle, he still admits those of the deer, lodra, beavers, and sea-calves. If to these we add the tygers, the lions without hair, and the stag, according to the testimony of Hernandez and Oviedo, we shall find at least eight species of quadrupeds common to both continents which are larger of their kind in the new than they are in the old world. To those above mentioned we ought also to add those quadrupeds which are equally large in both continents ; as the latter as well as the former demonstrate the falsity of such a general principle. Hernandez affirms, that the Mexican wolf is of the same size with the European. Count de Buffon says, that there is no difference between them, except that the Mexican wolf has a finer skin, and five toes in its fore feet, and four in its hind feet. With respect to bears, there are at present many persons in Europe who have seen the bears of Mexico and those of the Alps. We do not believe that among all of these witnesses there will be found one who has acknowledged that the European bears are the larger of the two. For ourselves at least we can declare, that all those we have seen in Mexico appeared to be larger than those which we have seen in Italy (*r*).

It is therefore no just assertion that all the animals of the new world are without exception smaller than those of the old. The count de Buffon spoke at random when he affirmed in another place that the animals were all *much* smaller, and that nature had in the new world made use

(*r*) The count de Buffon distinguishes the species of black from that of brown bears, and affirms that the black bears are not at all ferocious ; but the Mexican bears, which are all black, are extremely fierce, as is notorious in Mexico, of which also we can bear testimony.

use of a different scale of dimensions (*u*). It is easy also to demonstrate the mistake of Mr. de Paw, when he says that all the quadrupeds of America are a sixth less than their correspondents in the old continent. The Tuza of Mexico is analogous to the European mole, but is larger according to what count de Buffon says. That Mexican quadruped called by count de Buffon *coqualline*, and by us *tlalmototli*, is analogous to the European squirrel, and yet according to the same author is of twice its size. The coyote, analogous to the chacal, is of twice its size. The llama, or ram of Peru, analogous to the European ram, is beyond comparison larger, &c. But those philosophers are so eager to depreciate and undervalue its animals, that they even find subject for censure in their tails, in their feet, and in their teeth. “Not only,” says count de Buffon, “has there been a scarcity of matter in the new continent, but likewise the forms of its animals are imperfect, and appear to have been neglected. The animals of South America, which are those that properly belong to the new continent, are almost all deprived of tusks, horns, and tails; their shape is extravagant, their limbs disproportionate, and ill set; and some of them, like the ant-killers and sloths, are of so miserable a nature, that they have hardly ability to move, and to eat.” “The animals native to the new world,” says Mr. de Paw, “are in general of an ungraceful form; some of them so awkwardly made, that those who first made designs of them could hardly express their characters. It has been observed that the greater part of them want the tail, and have a particular irregularity in
“ their

“ their feet. This is remarkable in the tapir, the ant-
 “ killer, the llama of Margraf, in the sloth, and the *ca-*
 “ *beay*. The ostriches, which in our continent have not
 “ more than two toes, united by a membrane, all have
 “ four in America, and those separated.”

Such a mode of reasoning is rather a censure of the conduct of Providence than of the clime of America, and not unlike the sceptical opinions attributed to king Don Alphonso the Wise, respecting the disposition of the heavenly bodies. If the first individuals of those animals came not so from the hand of the Creator, but the clime of America has been the cause of their supposed irregularity, whenever those animals should be transported to Europe their forms would grow perfect, and their disposition and instinct also ; at least after ten or twelve generations those miserable animals which the malignant clime of America has deprived of their tails, their horns, and their tusks, would recover them under a more benignant clime. No, those philosophers would say, because it is not so easy to recover from nature what is lost, as to lose what she has given ; so that although those poor animals would not in the old continent recover their tails, their tusks, or their horns, still it must be allowed that the climate of America has been the cause of their losing them. Be it so. At present, however, we shall not treat of irregularities which consist in any deficiency but of those where there is an excess of matter. We allude at present to the ostriches, which, according to Mr. de Paw (*), have from a vice of nature, two extraordinary

(*) Mr. de Paw is deceived with regard to the number of toes of the ostrich of America, for it has no more than three ; although in the hinder part of its feet it has a round and callous swelling which serves in place of a talon, and by the vulgar is thought to be a toe.

traordinary toes in each of their feet ; but that we may not quit the quadrupeds, we shall mention the Unau, a species of American sloth, which amongst other of its irregularities, has got forty-six ribs. “ The number of “ forty-six ribs in an animal of so small a body,” says Mr. de Buffon, “ is a kind of error or excess of nature ; “ for no animal even among the largest, or among those “ which have the longest body in proportion to their “ thickness, has so many. The elephant has not more “ than forty, the horse thirty-six, the badger thirty, the “ dog twenty-six, and man twenty-four.” If the first Unau which ever was, had the same number of ribs given it by the Creator which its posterity have at present, the reasoning held by Mr. de Buffon is a censure of Providence ; and when he says that that excessive number of ribs has been an error of nature, he means an error of Providence, who is efficient nature. We are certain such an idea is far from the elevated mind of the count de Buffon ; but the spirit of philosophy, which runs through all his works, leads him sometimes into rather exceptionable expressions (a). If, on the contrary, those philosophers believe, that the Unau had originally a number of ribs proportioned to the size of its body, and that the malignant clime of America did increase them gradually afterwards, we ought to believe, that if that species of quadruped was transported to the old continent, and was bred under a more favouring sky, it would at last be restored to its primitive perfection. Let

VOL. III.

E e

the

(a) The count de Buffon, desirous of assigning a reason why man resists the influence of climate better than the animals, says, in volume xviii. “ Man is “ altogether the work of heaven, the animals in many respects are but productions of the earth.” This proposition appears a little too bold ; but we meet with many still stronger in his *Epoques de la Nature*.

the experiment be made ; let two or three males of this ungraceful species, and as many females, be transported there, and if, after twenty or more generations, it is found that their number of ribs begins to diminish, then we shall acknowledge that the land of America is the most unhappy, and its climate the most baneful in all the world. If it happens otherwise, we will say, as we shall henceforward say, that the logic of these gentlemen is more contemptible than that quadruped, and that their reasonings are mere paralogisms. In other respects it is truly to be wondered at in a country where there has been such a scarcity of matter, that nature should have made a transgression by an excess of it in the ribs of sloths, and in the toes of ostriches.

But to shew that those philosophers, while exerting themselves to fix the character of malignity on the climate of the new world, had totally lost recollection of the miseries of their own continent ; let us ask them what is the most miserable animal in America, they will immediately answer, the sloth ; because this animal is the most imperfect in its organization, the most incapable of motion, the most unprovided with arms for its defence, and above all, that it appears to have less sensations than any other quadruped ; an animal, truly wretched, condemned by nature to inactivity, listlessness, famine, and melancholy, by which it continually excites the compassion and horror of other species. But this class of quadrupeds, so famous for their misery, is common to both continents. Count de Buffon will not believe it, because it does not suit his system, and says, that if any sloth is found in Asia, it must have been transported there from America ; but whatever he may say, it is certain, from the attestations of Klein, Linnæus, Briffon,

Briffon, the publisher of the Cabinet of Seba, and above them all Vosmaer, a learned and diligent naturalist of Holland (*b*), that the Unau, one of the species of sloths, is an Asiatic animal. The Unau of Bengal, which has been seen, bred, and exactly described by this naturalist, cannot have been transported from America; for no commerce between South America and Asia has ever subsisted. Besides, the Unau of Bengal differs from that of America: the former has five, the latter only two toes to its feet. If the count de Buffon is persuaded that the climate of Asia could increase the number of toes of the American quadruped, we would then say to those quadrupeds that the climate of the old continent would be capable of restoring the tails, horns, and tusks, of which the pernicious climate of America has deprived them. Whoever will read the eloquent description given of the American sloth by the count de Buffon, and compare it with that given by Mr. Vosmaer of the sloth *pentadactylus* of Bengal, will soon perceive that this Asiatic quadruped is as miserable as those of America.

But let us philosophically examine what those authors say respecting the supposed irregularity of those quadrupeds. Real irregularity in animals is some disproportion of their limbs, or singularity in the form, or in the dispositions of some individuals with respect to the generality of their species, not that which is observed in a new species compared with one which is known. It would be extremely absurd to consider the *techichi* an irregular animal, because it does not bark. This is an American quadruped, which, from its resemblance to European dogs, was called dog by the Spaniards: not because it was of the same species: and from thence
rose

(*b*) *Description de plusieurs Animaux.* A work printed at Amsterdam.

rose the fable propagated by not a few authors, that in America dogs were mute. Wolves are extremely similar to dogs, but they do not bark. If the first Spaniards who went to Mexico had not seen wolves in Europe, when they saw those of Mexico they would have reported, that there were large dogs there which could not be tamed, and that they did not bark but howled. And this would have furnished count de Buffon and Mr. de Paw with a new argument to prove the degeneracy and irregularity of American animals.

The argument of Mr. de Paw concerning American ostriches has no more weight. The *Touyou* is an American bird specifically different from the ostrich; but because it is large, and very similar to that African bird, it has been vulgarly called ostrich (*c*). This is sufficient to make Mr. de Paw affirm that there is irregularity in those American birds; but if we should allow that the *Touyou* is truly an ostrich he could not make out his position. He would make us believe the American ostrich irregular, because instead of having only two toes united by a membrane like the African, it has four separate toes. But an American might say that the African ostrich is rather irregular, because instead of having four separate toes, it has only two, and those united by means of a membrane. "No," Mr. de Paw would reply in rage, "it is not so: the irregularity is certainly in your ostriches, because they do not conform with those of the old world which are the original species; nor with the representation which the most famous naturalists of Europe have left us of such birds." "Our world," the American would return, "which you call new, because three centuries ago it was not discovered"

(c) In Peru the ostrich is known by the name of Suri.

“ covered by you, is as ancient as yours, and our animals are cotemporary with yours. They are under
“ no necessity of conforming with your animals, neither
“ are we to blame that the species of our animals have
“ been unknown to your naturalists, or confounded by
“ a superficial knowledge of them. Therefore either
“ your ostriches are irregular because they do not conform with ours ; or at least ours ought not to be called irregular because they do not conform with yours.
“ Until you demonstrate to us by incontestible proofs, that the first ostriches came from the hand of the
“ Creator with only two toes united by a membrane, you will never persuade us of the irregularity of our
“ Touyou.” This mode of argument, which is without doubt unanswerable, is sufficient to defeat the systems adopted by those philosophers, arising from slight and indigested ideas, and strong prepossessions in favour of the old continent.

Those philosophers are not more happy in their discourses on the tails of quadrupeds than in their observations on the feet of ostriches. They say directly, and without any regard to truth, that the greater part of the quadrupeds of the new continent are totally destitute of tails ; which, like all the other effects observed by them in those unfortunate countries, they ascribe to the misery of the American sky, to the infancy of nature in that part of the world, to the fatality of the climate, and other combinations of the elements. Thus those celebrated philosophers of this enlightened century reason. But there being, according to count de Buffon, seventy species of American quadrupeds, it would be necessary that at least forty of them were without tails in order to verify what Mr. de Paw has said, that the
majority

majority of them were deprived of this member; and many more would be requisite to prove true, that almost all the quadrupeds were unfurnished with tails as count de Buffon affirms. However, animals of this description in America, as we shall presently find, are only six in number, therefore the proposition is a monstrous hyperbole, not to say an idle falsehood.

It appears that in the time of Pliny no other animals were known to be without tails but man and the ape. If since that time there had been no other animal unfurnished with such member discovered in the old continent, count de Buffon and M. de Paw would have been right in taxing the American quadrupeds with it; but from the History of count de Buffon it is evident, the species without tails are more numerous in the old continent than in America. Here follows a list of both, extracted from the History of count de Buffon.

Quadrupeds without tails in the old continent.

1. The *Pongo*, or Orang Outang, or Satyr or Man of the Woods.
2. The *Pithecus*, or Proper Ape.
3. The *Gibbon*, another species of ape.
4. The *Cynocephalus*, or Magoto.
5. The Turkish dog.
6. The *Tanrec* of Madagascar.
7. The *Loris* of Ceylon.
8. The Indian Pig.
9. The *Rouffette* }
10. The *Rougette* } Two species of great bats of Asia.
11. The golden mole of Siberia.

To which the three following should be added :

12. The five-toed sloth of Bengal, described by Vossmaer.

13. The

13. The *Klipda*, or bastard marmot, of the Cape of Good Hope, described by Vosmaer.
14. The *Capiverd*, or *Capivard* of the Cape of Good Hope, described by Bomare.

IN AMERICA.

1. The Unau species of sloth.
2. The *Cabeay*, or amphibious hog.
3. The *Aperea* of Brasil.
4. The Indian pig.
5. The *Saino*, *Pecar*, or *Cojametl*.
6. The *Tapeto*.

Therefore in the old continent there are at least fourteen species of quadrupeds (*d*) unfurnished with tails, and in America only six, of which we might except the two last, as they are uncertain (*e*). In all the thirty volumes of the History of Quadrupeds of count de Buffon, we have found no other American animal without a tail except those above mentioned: and notwithstanding he ventured to affirm that in the new world almost all the animals were deprived of tails; it appears from hence that such universal propositions are as easily offered as they are difficult of proof.

If

(*d*) To the fourteen species above mentioned we might add the Unau *Dasyllus* of Ceylon, mentioned by several authors, and the Porte-musc, described by Mr. Aubenton and Bomare; but we omit the first, because we are not certain that it is different from the Loris of Buffon; we pass the second also, because it may have some little tail, although the diligent M. d' Aubenton did not find it.

(*e*) The Pecar is described by Oviedo, Hernandez, and Acofta, under the names *Saino* and *Cojametl*; but they say nothing of its want of a tail. We have been informed by accurate and distinct persons, who have seen many Pecars, that they had a tail, although it was small. With respect to the Tapeto, the count de Buffon believes it to be the *Citli* of Hernandez. But all Mexicans know that the *Citli* of Hernandez is the hare of Mexico, and we are certain it has a tail like the common hare of Europe.

If the clime of America is so pernicious to the tails of animals, how comes it that while four species of apes of the old continent are deprived of such a member, namely, the *Pongo*, the *Pithecus*, the *Gibbon*, and the *Cynocephalus*, all the species of apes of the new world have them, and some, such as the *Saki*, have tails so long that they are twice the length of their bodies; why do squirrels, *Coquallines*, ant-killers, and other such quadrupeds, abound in America, which are furnished with such enormous tails in proportion to their bodies? Why has the marmot of Canada, although it is of the same species with that of the Alps, a larger tail, as count de Buffon himself confesses? Why have the deer of America, although finaller than those of the old continent, a longer tail, as the same author affirms (*f*)? If the climate of America was ever possessed of some principle destructive to tails of animals, those which Columbus transported there from Europe, and the Canary Isles, in 1493, would have by this time lost all tail, particularly hogs, which carried such short tails there, or at least they would have been remarkably shortened after two hundred and eighty-eight years; but among all the Europeans who have seen the sheep, horses, oxen, &c. bred in America, and those which were bred at the same time in Europe, there has not been one writer who could find any difference between the tails of the one and the other.

This same argument is equally valid against what count de Buffon says upon the want of horns, and tusks in the greater part of American quadrupeds, as the oxen, the sheep and goats, preserve without change their
horns,

(*f*) Hist Nat. tom. xviii.

horns, the dogs and hogs their teeth, and the cats their nails, as all those who have seen and compared them with those of Europe can testify. If the clime of America was so destructive to the teeth and horns of animals, a number of them would have been lost, at least by the posterity of those quadrupeds of Europe, which were transported there almost three centuries ago, and much more the generations of wolves, bears, and other similar quadrupeds, which passed there from Asia, perhaps in the first century after the deluge. If, on the contrary, the temperate zone of Europe is more propitious to the teeth of animals than the torrid zone of the new world, why did nature give to the latter, and not to the former, the tapir and crocodile, which in number, size, and sharpness of their teeth, exceed all the quadrupeds and reptiles of Europe?

Lastly, if there are some animals in America without horns, without teeth (g), and without tails, it is not owing to the climate or niggard sky of America, or any imaginary combination of the elements, but because the Creator, whose works and whose counsels we should humbly revere, chose it so, that such variety might serve to embellish the universe, and make his wisdom and his power more conspicuous. What gives beauty to some animals would render others deformed. It is perfection in a horse to have a large tail, in the stag to have a small one, and in the Pongo to have none at all.

VOL. III.

F f

With

(g) Among all the quadrupeds of the new world, the ant-killers alone are destitute of teeth, like the *Pangolino* and *Tatagino* of the East-Indies, which quadrupeds are covered with scales instead of hair. All those quadrupeds which feed on nothing but ants have no occasion for teeth; but they are furnished by the Creator with a long tongue, with which they can dexterously lick up the ants and swallow them.

With respect to what our philosophers say of the ugliness of the animals of America, it is true, that among so many, there are some whose forms do not correspond with the ideas which we entertain of the beauty of beasts; but who has assured us, that our ideas are just, and not imperfect, and occasioned by the narrowness of our minds? And how many animals could we not find in the old continent still worse formed than any beast of America? What quadruped is there in America which can be compared, in the deformity and disproportion of its limbs with the elephant, called by the count de Buffon a *monster of matter* (*b*)? Its vast mass of flesh, higher than it is long, its disgusting skin without hair and furrowed with wrinkles; its enormous trunk instead of a nose; its long teeth placed without its most hideous mouth, and turned upwards, contrary to what is observed in other animals, in order to increase the deformity of its face; its vast polygonous ears; its thick, crooked, and proportionably small legs; its unformed feet, with toes scarcely distinguished; and lastly, its diminutive eyes and ridiculously small tail to a body so immense, are all circumstances which render the elephant a most irregular quadruped. We challenge our philosophers to find in the new world an animal more disproportioned, or whose form is more ungraceful. Similar reflections arise from viewing the camel, the *Macaco*, of which count de Buffon says that it is *hideously deformed*, and more so than all other animals of the old continent; we dare not, however,

(*b*) En considerant cet animal, (says Bomare of the elephant) relativement à l'idée, qui nous avons de la justesse des proportions, il semble mal-proportionné a cause de son corps gros et court, des ses jambres roides et mal-formées, des ses pieds ronds et tortus, de sa tête grosse, de ses petits yeux et des ses grandes oreilles; on pourroit dire aussi que l'habit dont il est couvert est encore plus mal taille et plus mal fait. Sa trompe, ses defenses, ses pieds le rendent aussi extraordinaire que la grandeur de sa taille.

ever, blame the clime to which they belong, nor censure the Supreme Artificer who formed them.

What our philosophers say with respect to the smaller ferocity of American wild beasts, instead of assisting them to prove the malignity of that clime, serves only to demonstrate its mildness and bounty. "In America," says count de Buffon, "where the air and the land are more mild than those of Africa, the tyger, the lion, and the panther are terrible only in name . . . They have degenerated, if fierceness joined to cruelty made their nature; or, to speak more properly, they have only suffered the influence of the climate." What more can be desired in favour of the climate of America? Why, therefore, does he ever adduce the smaller ferocity of American animals as an argument of their degeneracy occasioned by the malignity of that clime? If the climate of the old continent should be esteemed better than that of the new world, because under the former the wild beasts are found more terrible, for the same reason the climate of Africa ought to be esteemed incomparably more excellent than that of Europe. This argument, which we have already made use of, might be carried much farther to the confusion of our philosophers.

But those authors have not a just idea of American animals. It is true that the *Mitzli*, or Mexican lion, is not to be compared with the celebrated lions of Africa. The latter species either never did pass into the new world, or was extirpated by man; but the former does not yield to those of its species, or the lion without hair of the old continent, according to the testimony of Hernandez, who knew both the one and the other. The Mexican tyger, whether it is or is not of the same species with the
royal

royal tyger of Africa, as that is of no importance, has surprising strength and ferocity. There is no quadruped, among those of Europe or America, which can be opposed to it. It intrepidly attacks and tears men, deer, horses, bulls, and even the most monstrous crocodiles, as Acoſta affirms. This learned author vaunts both its intrepidity and ſwiftness. G. de Oviedo, who had travelled through many countries of Europe, and was not ignorant of natural history, ſpeaking of thoſe American tygers, ſays, “ They are animals very ſtrong in the legs, “ well armed with claws, and ſo terrible, that in my judgment, none of the greateſt royal lions can rival their “ ſtrength and ferocity.” The tyger is the terror of the American woods ; it is not poſſible to tame it or catch it when it is grown up : thoſe which are taken when young are not to be kept without danger, unleſs they are ſhut up in the ſtrongeſt cages of wood or iron. Such is the character of thoſe animals which are called cowardly by Mr. de Paw and other authors, who were unable to diſtinguiſh the ſpecies of quadrupeds with ſpotted ſkins.

It is however certain, that thoſe authors ſhew themſelves as credulous of every thing they find written concerning the ſize, ſtrength, and intrepidity of the royal tygers of the old continent, as they are obſtinate in denying faith to what eye-witneſſes ſay of American tygers. Count de Buffon believes, upon the attestation of we do not know what author, that the royal tyger is from thirteen to fourteen feet in length, and five in height ; that it will engage with three elephants, kill a buffaloe, and drag it wherever it pleaſes, and other ſimilar abſurdities, which can only gain belief from thoſe who are prejudiced in favour of the old continent. If ſome authors deſerving of faith ſhould relate of the American tygers a
few

few of the particulars which are told of Asiatic tygers they would be considered as idle exaggerating boasters (*i*). The account which Pliny (*k*) gives of the artifices of hunters in robbing the tyger of its young, and the coolness of temper with which it carries them off again one by one, and that which Bomare relates (*l*) of the combat in the year 1764, in Windsor forest, in England, between the stag and a tyger brought from India to the duke of Cumberland, in which the stag came off conqueror, shews us that the ferocity of those Asiatic wild beasts is not so great as count de Buffon and Mr. de Paw represent it.

The American wolves are not less strong nor bold than those of the old continent, as all who have had any experience of them both know. Even stags, which as Pliny says, are very tranquil animals, are so daring in Mexico, that they frequently attack the hunters; this fact is testified by Hernandez, and is notorious in that kingdom; we have seen in our own dwelling the vicious nature of a stag, which had become almost domestic, shew itself most cruelly upon an American girl.

But let the American quadrupeds be smaller in size, more ungraceful in form, and more pusillanimous in their nature; let us grant to those philosophers that from such a position the happiness of the climate of the old continent is to be deduced; they will not still persuade us, that it is a full proof and a certain argument of the malignity of the American climate, while they do not shew us in
the

(*i*) It is sufficient to observe the little credit given by these authors to the testimony of Mr. Condamine, notwithstanding the esteem in which they held that learned mathematician.

(*k*) Nat. Hist. lib. viii. cap. 18.

(*l*) Bomare Diction. d'Histoire Nat. V. Tigre.

the reptiles and birds of America (*l*) the same degeneracy which they suppose in quadrupeds. Mr. de Paw says of American crocodiles, whose ferocity is notorious, that it appears from the observations of Mr. du Pratz, and others, that they have not the fury and impetuosity of those of Africa. But Hernandez, who knew both the one and the other, found no difference between them (*m*). Acosta says, that those of America are extremely fierce but slow; but this slowness is not in a progressive line forwards, in which motion they are most swift and active, but in turning only, or bending from one side to another, as is the case with the crocodiles of Africa, on account of the inflexibility of their *vertebræ*. Hernandez affirms that the *Acuetzpalin*, or Mexican crocodile, flies from those who attack it, but pursues those who fly from it, although the former case happens more seldom than the latter. Pliny says the same thing of African crocodiles (*n*). In short, if we compare what Pliny says of the latter with what Hernandez says of the former, it will appear that there is not even a difference of size between them (*o*).

With

(*l*) The count de Buffon might say, as he observes in vol. xviii. that we ought not to consider the birds with respect to climate in this particular, because it being easy for them to pass from one climate to another, it would be almost impossible to determine which belonged properly to the one or to the other. But as the cause of the passage of birds is the cold or the heat of the seasons, which they wish to avoid, on this account the American birds have no occasion to leave their continent, because there they have countries of every sort of climate to shelter themselves from every hurtful season, and where they can always find their food. We are altogether certain, that the Mexican birds do not travel to the old continent.

(*m*) Hern. Hist. Nat. lib. ix. cap. 3.

(*n*) Terribilis hæc contra fugaces bellua est, fugax contra insequentes. Plin. Hist. Nat. lib. viii. cap. 25.

(*o*) Pliny says that the African crocodile is often more than eighteen cubits, or twenty-seven Roman feet in length. Hernandez affirms that the Mexican crocodile

With regard to birds, Mr. de Paw makes mention only of ostriches, and that so negligently as we have shewn. He certainly designed to be silent on this subject, discovering that on this side his cause was lost, for whether we consider number or variety of species, intrepidity, or beauty of plumage, and excellence of song, the old continent cannot be compared with America as to birds. Of their surprising multitude we have already spoken. The fields, the woods, the rivers, the lakes, and even inhabited places are filled with innumerable species. Gemelli, who had made the tour of the world, and seen the best countries of Asia, Africa, and Europe, declares that there is not a country in the world which can compare with New Spain in the beauty and variety of its birds (*p*). See what is said by the historians of New France, Louisiana, Brasil, and other countries of the new world, on this subject.

Of the strength and courage of American birds many European authors worthy of credit make mention. Hernandez, who had so much experience of birds of prey, in the court of Philip II. king of Spain, at the time when hawking was most in vogue, and had observed also those of Mexico, confesses when he talks of the *Quauhlotli*, or Mexican falcon, that all the birds of this class are better and more courageous in New Spain than they are in the old continent (*q*). On account of the
excellence

crocodile is usually more than seven paces long. If he speaks of Castilian paces, they make almost twenty-eight Roman feet; if he speaks of Roman paces, they will make thirty-five feet, so that the difference is trifling, or if there is any it is in favour of the American crocodile.

(*p*) *Ella e tanta la vaghezza e la varieta degli uccelli della N. Spagna cho non v'e paese almondo, the ne abbia pari.* Giro del Mondo. tom. vi. lib. ii. cap. 9.

(*q*) *Fateor accipitrum omne genus apud hanc novam Hispaniam, Jucatanicamve provinciam repertum præstantius esse atque animosius vetere in orbe natis.* Hernandez de Avibus N. Hisp. cap. 92.

excellence of the Mexican falcons having been known and acknowledged, Charles the V. ordered that every year fifty hawks should be sent to him from New Spain, and as many from the island of Hispaniola, as the historian Herrera attests; and Acoſta relates, that the falcons of Mexico and Peru, because they were much esteemed, were sent in presents to the grandees of Spain. Acoſta alſo ſays, that the condors, or Mexican vultures, are of an impenſe ſize, and have ſo much ſtrength, that they not only tear a ram, but even a calf; and D. A. Ulloa teſtifies, that a ſtroke of their wing will knock down a man (r). Hernandez ſays, that the *Itzquaubtli*, or royal eagle of Mexico, attacks men, and even the fierceſt quadrupeds. If the climate of America had taken from the quadrupeds their ſtrength and courage, it would without doubt have produced the ſame effect on birds: but from the teſtimony of the above mentioned writers, and other European authors, it is manifeſt that they are not feeble or puſillanimous, but that they excel thoſe of the old continent in intrepidity and ſtrength.

With reſpect to the beauty of birds, thoſe authors do not reſuſe the ſuperiority to America, although in other reſpects they have ſo eagerly depreciated the new world. Whoever would form to himſelf a competent idea of them, may conſult Oviedo, Hernandez, Acoſta, Ulloa, and other European authors, who have ſeen the birds of America. In New Spain, ſays Acoſta, there is a
great

(r) The condor is ſo large as to meaſure from fourteen to ſixteen feet from tip to tip of the wings when extended. Bomare ſays it is common to both continents; and that the Swiſs call it the *laemmer-geyer*; but notwithstanding this, it is certain that no bird of prey has been found yet on the old continent equal in ſize and ſtrength to the condor of America.

great plenty of birds adorned with such beautiful plumage, that they are not equalled by any in Europe.

It is true, say many European authors, that American birds are superior in beauty of plumage, but not in excellence of song, in which they are exceeded by those of Europe. So think two modern Italians (*s*): but however learned they are in certain speculative subjects, they are equally ignorant of the productions of America: it will be sufficient; in order to confute those authors, to subjoin the testimony of Hernandez to this point (*t*); who, after having heard the singing of the best nightingales at the court of Philip II. heard for many years the *centzontli* or polyglots, the cardinals *tigrets*, the *cuitlaccochis*, and other innumerable species of vulgar singing birds in Mexico unknown in Europe, besides the nightingales, *calderines* calandras, and others common to both continents. Among the singing birds most esteemed in Europe the nightingale is the most celebrated, but it sings still better in America, according to the affirmation of Mr. Bomare. The nightingale of Louisiana is, he says, the same with that of Europe; but it is more tame and familiar, and sings the whole

VOL. III.

G g

year,

(*s*) The author of a certain Dissertation metaphysical and political, *Sulla Proportzione de' Talenti e del loro Uso*, in which he has written most preposterous particulars respecting America, and shewn himself as ignorant as a child, of the land, the climate, the animals, and the inhabitants of that new world. The other is the author of some beautiful Italian fables, in one of which an American bird holds a discourse with a nightingale.

(*t*) In caveis quibus detinetur, suavissime cantat; nec est avis ulla, animalve cujus vocem non reddat luculentissime et exquisitissime æmuletur. Quid? Philomelam nostram longo superat intervallo, cujus suavissimum concentum tantopere laudant celebrantque, vetusti auctores, et quidquid avicularum apud nostrum orbem cantu auditur suavissimum. Hernandez de Avibus N. Hisp. cap. 30 de centzontlatole five cenzonli.

Linnaeus calls the centzontli *orpheus*. Other authors call it *moquer*, the mocking-bird, or Bestardo.

year, and has a more varied song. These are three considerable advantages which it possesses over the European bird. But although there were not in America either nightingales, calandras, or any one of those birds which are esteemed in Europe for their song, the centzontli or polyglot alone would be sufficient to excite the envy of any country in the world. We are free to declare to our Anti-american philosophers, that what Hernandez says of the excellence of the polyglot over the nightingale is extremely true, and agreeable to the opinion of many Europeans who have been in Mexico, and also of many Mexicans who have been in Europe. Besides the singular sweetness of its song, the prodigious variety of its notes, and its agreeable talent in counterfeiting the different tones of the birds and quadrupeds which it hears (*u*); it is less shy than the nightingale, and more common, as its species is one of the most numerous. If we were disposed to reason in the manner of Mr. de Paw, we could, in order to demonstrate the benignity of the American clime, add, that some birds which are not valued in Europe for their singing, sing much better in America. The sparrows, says Valdeebro, an European author, which do not sing in Spain, are in New Spain better than *calderines* (*x*).

What we observe of singing birds may be applied also to those which imitate the human voice; for in Asia and Africa the species of parrots are neither so many nor so numerous as they are in America.

But

(*u*) Mr. Barrington, vice-president of the Royal Society of London, says, in a curious work he has written on the singing of birds, and presented to that learned academy, that he heard a polyglot which counterfeited in the space of one single minute, the singing of the lark, the chaffinch, the black-bird, the sparrow, and the thrush.

(*x*) In a work entitled *Gobierno de las Aves*, lib. v. cap. 29. But we have already observed, that the Mexican sparrow, though resembling, is different from, the true sparrow.

But as we are discoursing of birds, we will, before we end this subject, make an obvious reflection. There is not an American animal which draws so much reproach upon it from our philosophers as the sloth, on account of its astonishing indolence and inability of motion. But what would they say if there was a bird of this nature? This would certainly be the most irregular animal in the world, for such an inactivity or slowness is more preposterous in a bird than in a quadruped. But where is this bird? In the old continent, and has been described by count de Buffon; who says that the *Dronte*, a bird of the East-Indies, larger than the swan, is among birds what the sloth is among quadrupeds: it appears, he says, a turtle in the clothing of a bird; and nature in granting it those useless ornaments, wings and tail, seems to have intended to add embarrassment to its weight, and irregularity of motion to the inactivity of its body, and to make its cumbrous largeness still more afflicting, by putting it in remembrance that it is a bird.

From what we have said we cannot avoid concluding, that the sky of America is not niggardly, nor its climate unfavourable to the generation of animals; that there has been no scarcity of matter, nor has nature made use of a different scale of proportions in that region: that what count de Buffon and Mr. de Paw have said of the smallness, of the irregularity, and defects of American quadrupeds is erroneous, or rather a series of errors: and though it was true, it would be of no assistance to prove the malignity of the climate of America. But we shall now enquire whether they have done less wrong to the new world in what they say of the supposed degeneracy of quadrupeds transported there from Europe.

S E C T. II.

Of the Animals transported from Europe to America.

ALL the animals transported from Europe to America, such as horses, asses, bulls, sheep, goats, hogs, and dogs, are, says count de Buffon, *considerably smaller there than they are in Europe*, and that, *without one single exception*. If we seek for the proof of so general, or rather an universal assertion, we shall find no other in all the history of that philosopher, than, that cows, sheep, goats, hogs, and dogs are smaller in Canada than they are in France. The European or Asiatic animals, says Mr. de Paw, that were transported to America immediately after its discovery, have degenerated, their corpulence has diminished, and they have lost a portion of their instinct and genius: the cartilages or fibres of their flesh have become more rigid and more gross. Such is the general conclusion of Mr. de Paw. Let us now attend to the proofs. First, The flesh of oxen in the island of Hispaniola is so fibrous that it can hardly be eaten; secondly, the hogs in the island of Cubagua changed in a short time their forms to such a degree, that they could hardly be known again; their nails grew so much that they were half a palm in length. Thirdly, Sheep suffered a great alteration in Barbadoes. Fourthly, Dogs transported from their own countries lose their voice, and cease to bark, in the greater part of the regions of the new continent. Fifthly, The cold of Peru incapacitated camels carried there from Africa, in their organs of generation. Such are the arguments which those philosophers use to ascertain the degeneracy of animals of the old continent, in the new world; arguments which,

which, if they were true, would not be sufficient to prove so universal a position: because of what importance is it that the flesh of oxen is so fibrous in the island of Hispaniola, if in all the other parts of America it is good, and in many, particularly in all those of Mexico which are situated on the coast of the Pacific Ocean, equal to the best in Europe, and possibly better? What signifies it that sheep have undergone some change in Barbadoes, and other hot countries, if, in the temperate countries of Mexico and South America they continue the same as they came there from Spain? What does it avail that hogs have become disfigured in Cubagua, a miserable little island, deprived of water and every thing necessary for life, if in other parts of America they have acquired, as Mr. de Paw says himself, an extraordinary corpulence and their flesh has become so improved, that the physicians there prescribe it to the sick in preference to all other meat. If the hogs, having grown disfigured in Cubagua, it does not prove that the clime of America is not the most suitable to them, why should the sheep having suffered some change in Barbadoes, the flesh of oxen having become more fibrous in Hispaniola, and some quadrupeds having grown less in Canada, serve to prove that the clime of America in general is unfavourable to the generation of animals, to their corpulence and instinct?

If such logic was to be tolerated, we could adduce much stronger arguments against the climate of the old continent without making use of any other materials than those that are furnished to us by count de Buffon in his *Natural History*. Camels have never multiplied, as he says, in Spain, although that clime of all the climes of Europe is the least contrary to their nature. Oxen have
degenerated

degenerated in Barbary, and in Iceland they have lost their horns. Sheep, says count de Buffon, have degenerated in our country from their first existence in it ; and in all the hot countries of the old continent they change their wool into hair. Goats have grown small in Guinea and other countries. In Lapland dogs have become extremely small and deformed, and those of the temperate climes when transported into cold climes cease to bark, and after the first generation are born with strait ears. From the accounts of travellers it is certain that mastiffs, grey-hounds, and other breeds of dogs of Europe transported to Madagascar, Calcutta, Madeira, and Malabar, degenerate after the second or third generation, and that in excessive hot countries, such as Guinea and Senegal, this degeneration is more rapid ; as in the space of three or four years they lose their hair, and their voice. Stags in mountainous countries which are hot and dry, such as those of Corsica and Sardinia, have lost a half of their corpulence. If to these and other accounts given us by count de Buffon we were to add those of many other authors, what examples should we not have of the degeneracy of animals in the old continent, more numerous and true than those of our philosophers ? But that we may expose the exaggeration and falsity which belong to their examples let us examine one by one the species of Asiatic and European animals transported into the new world which by them are said to have degenerated.

C A M E L S.

AMONG all the quadrupeds transported to America, says Mr. de Paw, the camels are unquestionably those which have thriven the least. In the beginning of the

the sixteenth century some of them were transported from Africa to Peru, where the cold disabled the organs necessary for their production, and they left no posterity. Setting aside the chronological error into which he falls, as being immaterial to our purpose (*y*), if it was cold that destroyed the species of camels in America, the same thing would have happened in the European northern countries, where the cold is beyond comparison greater than in any country whatever of Peru. If cold was the cause of their extirpation, let Mr. de Paw blame those who settled those quadrupeds in places unsuitable to their nature, and not America, where there are lands that are hot and dry, and proper for the subsistence of Camels. The same experiment which was made in Peru with camels, was also made in Spain, and with the same want of success; but still there are no persons who will doubt that the climate of the latter is one of the most mild and temperate in Europe. Count de Buffon says, that if proper precautions were taken, those animals would succeed not only in America but in Spain: and there is no doubt that they would prosper very well in New Galicia. Besides, it is false that the camels which were transported to Peru did not leave any posterity; for Acofta, who went there some years after, found that they had multiplied, though but a little (*z*).

O X E N.

THIS is one of those species of animals which our philosophers imagine to have degenerated in America; which

(*y*) Camels were not transported to Peru in the beginning of the sixteenth century, because that country was not then discovered; but towards the middle of that century, as Herrera shews in his Decades.

(*z*) Histor. Nat. y Mor. lib. iv. cap. 33.

which effect they attribute to the climate. But if possibly in Canada the oxen have lost part of their corpulence, as count de Buffon affirms, and if their flesh has become fibrous in Hispaniola, as Mr. de Paw would insinuate, this at least is not the case in the greater part of the countries of the new world, in which the multitude and size of those animals, and the goodness of their flesh, demonstrate how favourable the climate is to their propagation. Their prodigious multiplication in those countries is attested by many authors both ancient and modern. Acofta relates that in the fleet in which he returned from New to Old Spain, in 1587, about sixty years after the first bulls and cows had been transported to Mexico, they carried with them from that country sixty-four thousand three hundred sixty ox hides; and from Hispaniola alone, which Mr. de Paw believes so unfavourable to the propagation of those quadrupeds, thirty-five thousand four hundred and forty-four ox hides. We do not doubt, that if the number of bulls and cows carried from the old continent to the new, was compared with the number of hides returned by America to Europe, there would be found more than five millions of hides for every one of those animals. Valdeobro, a Dominican Spaniard, who lived some years in Mexico, towards the middle of the last century, relates, as a fact which was notorious, that the cows belonging to D. G. Ordugna, a private gentleman, yielded him in one year thirty-six thousand calves (*a*), which produce could not arise from a herd of less than two hundred thousand bulls and cows taken together. At present there are many private persons who are owners of herds of

(*a*) In his work entitled *Gobierno de Animales*, lib. iv. cap. 34.

of fifty thousand head of cattle. But nothing can shew the astonishing multiplication of those quadrupeds so well as the cheapness of them in those countries in which they are necessary for the subsistence of man, and the labours of the field, and where, on account of the abundance of silver, every thing is sold dear (*c.*) In short, oxen have multiplied in Mexico, in Paraguay, and other countries of the new world more than in *more ancient* Italy (*d.*).

With respect to the size of American oxen it is easy to gain perfect information, as ships loaded with their skins frequently arrive at Lisbon and at Cadiz (*e.*) Let Mr. de Paw, therefore, or any person who maintains the degeneracy of European animals in the new world, measure fifty or one hundred of those hides, and if they are found smaller than those of the common oxen in Europe, we shall immediately confess, that the climate of Ame-

VOL. III.

H h

rica

(*c.*) In the country round Mexico, the capital of New Spain, although it is well peopled, a pair of oxen for the plough are sold for ten sequins, and bulls by wholesale at forty-five paolis each. In the country round Guadalaxara, the capital of New Galicia, a pair of good oxen are worth from six to seven sequins, a cow twenty-five paoli. In many other countries of that kingdom, those animals are sold for less. In many places of the provinces on the river of Plata a cow is to be had for five paoli. According to an account we have obtained from a person of credit, well acquainted with the provinces on the above river, the oxen which are in herds amount to about five millions in number, and it is computed there are about two millions running wild in the woods.

(*d.*) Timeus, a Greek author, and Varro, both cited by Aulus Gellius (Noct. Attic. lib. ii. cap. i.) have said that Italy was so called from the abundance of oxen in it, which in the ancient Greek language were called *ιταλοι*: whence Gellius affirms that *italia* signifies *armentosissima*.

(*e.*) Every person knows that no country has more commerce with Spain in ox-hides than Paraguay, from whence vessels are sent entirely loaded with them. We have been informed by persons of credit who were experienced in that country, that the skins that were carried from thence to Spain, are at least three *varas* (a Spanish measure) long, and many are four, or more than ten Parisian feet. There are not, we conceive, three countries in Europe where oxen grow to such a size.

rica has shortened their bodies, and there is a scarcity of matter there ; on the contrary, they ought to confess that their information and intelligence is false, their observations ill founded, and their system visionary and chimerical : but that they may understand why we ought not to trust to their knowledge, G. Oviedo, who was one of the first peoplers of the island of Hispaniola, and sojourned there some years, discoursing of the oxen of that island, the flesh of which, Mr. de Paw says cannot be eaten because it is so fibrous, says that the “ herds “ there are more numerous, and more beautiful, than “ any in Spain ; and as the air in those regions is mild “ and never cold, the oxen never become meagre, nor “ is their flesh ever of a bad taste.” Count de Buffon affirms that cold countries are more favourable than hot to oxen ; but this is not the case in New Spain : as although the oxen of cold and temperate countries may be excellent, yet the oxen of warm countries are better. The flesh of these animals in maritime lands is so admired, that it is sent to the capital by way of present from places at two and three hundred miles distance.

S H E E P.

COUNT de Buffon confesses (e) that sheep have not succeeded so well in the hot as in the cold countries of the new continent ; but he adds, that although they have multiplied considerably, they are, notwithstanding, more meagre, and their flesh is less juicy, and less tender than it is in Europe, from which it appears that he has not been well informed. In the hot countries of the new world
sheep

(e) Hist. Nat. tom. xcvi.

sheep in general do not thrive, and the flesh of wethers is not good ; at this, however, we need not wonder, as the hot climes in the old continent are so pernicious to sheep that, as count de Buffon himself says, they become clothed with hair instead of wool. In the cold and temperate countries of New Spain they have multiplied superiorly to bulls, their wool in many places is as fine as the wool of the sheep in Spain, and their flesh as well tasted as any in Europe ; which all those who have visited those countries can testify. The multiplication of sheep in America has been surprising. Acosta relates (*f*) that before he went to America, there were in that country individuals possessing seventy, and sometimes one hundred thousand sheep ; and at present there are persons in New Spain who own four and five and even seven hundred thousand sheep (*g*). Valdebro says (*b*) that D. Diego Munoz Camargo, a Tlascalan noble, of whom we have made mention in our account of the writers of the ancient History of Mexico, obtained from ten sheep an increase of forty thousand in the space of ten years. How therefore could the climate be pernicious to their propagation, if they multiplied so excessively ? With respect to size, we declare sincerely, we have seen no rams in Europe larger than those of Mexico.

GOATS.

(*f*) Stor. Nat. e Mor. lib. iv. 33.

(*g*) The Europeans who have not been in America are extremely apt to be incredulous with regard to what we say of the number of oxen, horses, sheep, and goats, which many American farmers have upon their estates ; but having been long in that country, we assert no more than we know to be truth.

(*b*) In his work of *Gobierno de Animales*, lib. iv. cap. 34.

G O A T S.

THE count de Buffon, although so much disposed to revile the animals of America, confesses, notwithstanding, that the goats have prospered well in the climes of America, and that their multiplication is greater there than in Europe (*b*); for whereas in Europe they bring but a single kid, or two at most, at a birth, in America they bring three, four, and sometimes five. Mr. de Paw, who very justly gives to the count de Buffon the title of the Pliny of France, and refers to his authority on the subject of animals, as to one who has made a review of all the animals of the earth, ought to have considered and weighed these and other confessions of that learned philosopher, before he undertook to write or speculate concerning the animals or the productions of America.

H O G S.

OUR philosophers are not agreed upon this subject; for whereas the count de Buffon places hogs among the animals which have degenerated in America, Mr. de Paw, on the contrary affirms, that these are the only animals which have acquired in the new world an extraordinary corpulence, and whose flesh has been improved. This contradiction arose without doubt from the not distinguishing as they ought to have done the different countries of America. It may be, there are some places unknown to us where the hogs have lost something of their size: but it is certain that in New Spain, the Antilles, Terra-firma, and other places of America they are

(*b*) Hist. Nat. tom. xviii.

are as large as those of Europe ; and in the island of Cuba there is a breed of hogs twice as large as those of Europe ; which all who have been in those countries must have witnessed. Our philosophers may, if they please, have information from many European authors, who have seen the hogs of Toluca, of Angelopoli in New Spain, of Carthagena, of Cuba, &c. respecting their excessive multiplication, and the excellence of their flesh (*i*).

OF HORSES AND MULES.

OF all the reflections thrown out by the count de Buffon and Mr. de Paw against the animals of the new continent, there is no instance where they have done stronger injustice to America, and to truth, than in the supposed degeneracy of horses there. Of them Acosta says (*k*), “ that in many countries of America, or in the “ greater part, they have prospered and prosper well, “ and some breeds are as good as the best of Spain, not “ only for the course and for parade, but also for journey and labour.” A testimony of this kind from a European so critical, so impartial, and so well versed in the things of America and Europe, is of more weight than all the declamations of these philosophers against the new world. The lieutenant general D. Antonio Ulloa

(*i*) It will suffice to read what Acosta has written in lib. iv. cap. 38. of his History. “ It is certain,” says he, “ that hogs have multiplied abundantly “ through all America. Their flesh is eat fresh in many places, and esteemed very “ wholesome, and as much so as that of the sheep ; namely in Carthagena. . . . In “ some places they are fattened with corn, and become extremely fat. In others “ they make excellent lard and bacon of them, namely in Toluca of New Spain, “ and in Paria.” The count de Buffon in the same volume xviii. in which he classes the hog among the animals which have degenerated in America, says positively, that the hogs transported to America have thriven there well.

(*k*) Hist. Nat. y Mor. lib. iv. cap. 33.

Ulloa, a learned Spanish mathematician still living (1) speaks with astonishment of the American horses which he saw in Chili and Peru ; and celebrates those of Chili for their pace, those which are called *aguilillas* for their extraordinary velocity, and those called *parameros* for their wonderful agility in running in chase of the stag with riders upon them, down the sides, and up the steepest rocky parts of the mountains. He relates, that on one of those horses called *aguilillas* which, he adds, was none of the fleetest of his kind, he has frequently gone upwards of fifteen miles in fifty-seven or fifty-eight minutes. In New Spain there is an incredible plenty both of horses and mules. The multitude of them may be conjectured from their price ; at the time of the conquest an ordinary horse was worth a thousand crowns, at present a good one may be purchased for ten or twelve (*m*). Their size is the same as that of the common horses of Europe. In Mexico there is seldom a horse to be seen so small as the breed of Sclavonia which we see in Italy, and still feldomer so small as those of Iceland and other countries in the North, as Anderson, or those of India, as Tavernier and other authors relate. Their hardiness is such, that it is a frequent custom with the inhabitants of those countries to make journies of seventy, eighty, or more miles at a good pace the whole way, without stopping or changing their horses, however fatiguing the road. Saddle horses, although they are geldings for the
most

(1) Voyage to South America, part. I. lib. vi. cap. 9.

(*m*) In New Gallicia a middling horse is to be had for two sequins, a mule for three, or two and a half, and a herd of twenty-four mares with a stallion for twenty-five sequins. In Chili, for half a sequin or a crown may be purchased one of those horses that trot, which are much admired for their hardiness and activity in running, and a mare may be bought for an equally small consideration.

most part, have a prodigious spirit. Mules, which through the whole of that country serve for carriages, and for burdens, are equal in size to those of Europe. Those for burdens which are conducted by drivers, carry a load of about five hundred pounds weight. They do not travel more than twelve or fourteen miles a-day, according to the custom of that country ; but in this manner they make journies of eight hundred, a thousand, and fifteen hundred miles. Carriage mules go at the rate of the posts of Europe, although they draw a great deal more weight on account of the baggage of passengers. Saddle mules are made use of for very long journeys. It is common to make a journey on a mule from Mexico to Guatemala, which is about a thousand miles distance, over a track of country that is mountainous and rough, at the rate of three or four stages a-day. The above facts which we have inserted to shew the mistakes of our philosophers, are public and notorious in that kingdom, and agreeable to the report of several European authors. But nothing in our judgment can be a stronger indication of the plenty and excellence of American horses than the following observation which we have had occasion to make. Among the various things which are ordered from Spain, at great expense, by the Spaniards established in America, from the attachment they preserve to their native country, we do not know (at least with regard to Mexico) that for these two hundred years past, they have imported any horses ; and on the contrary, we are certain that American horses have frequently been sent to Spain as presents to the grandees of the court, and sometimes to the catholic king himself.

D O G S.

D O G S.

AMONG the absurd opinions entertained by Mr. de Paw, which are not a few, his ideas respecting dogs are not the least extraordinary: "Dogs," he says, (n) "when transported from our countries, immediately lose their voice, and cease to bark in the greater part of the regions of the new continent." The Americans meet a number of things to make them smile in the work of Mr. de Paw, but in reading this passage it may provoke their loud laughter. Although we should grant to Mr. de Paw that dogs have degenerated in many places, nothing could from thence be inferred against the new, which could not be equally well applied to the old world: for, according as Mr. de Buffon affirms, dogs when transported from the temperate into the cold climes of the old continent lose their voice, and when transported into extremely hot climes, they lose not only their voice, but also their hair. This assertion of the count de Buffon is supported by the experiment made on European dogs transported into Asia and Africa, whose degeneracy, he says, is so quick in Guinea and other very hot countries, that after three or four years they remain entirely mute and bald. Mr. de Paw does not dare to say so much of the dogs transported to America; but even that which he affirms is most false. In what countries of America have dogs lost their voice? On the faith of what author has he dared to publish such a fable? The greater part of the countries of America to which European dogs have been transported are subjected to the king of Spain, and in none
of

(n) Recherch. Philosoph. part i.

of them has such an accident happened to dogs. Neither among the European authors who have observed and noted the peculiarities of America, nor among the many Americans lately arrived from the countries of Spanish America, have we found one to confirm this anecdote from Mr. de Paw. That, however, which we know both from several writers of America, and many persons acquainted with those countries, is, that dogs never run mad either in Peru, Quito, or in other countries of the new world. Mr. de Paw perhaps read, that in some countries of America there were dogs which did not bark, and this was enough for him to publish that European dogs when transported to America soon lost their voice. In like manner it might be said, that figs when transplanted from Europe to America become immediately thorny, because the *nochtli* or *tuna* has thorns, and from some resemblance to the fig was called by the Spaniards Indian fig, in the same way as they called the *techichi*, the little dog of Mexico, because it resembled a little dog; but neither is this quadruped a real dog, nor that fruit a true fig. It is easy to be betrayed into such errors when the ideas of men wander in speculation, and the passions help their going astray. The count de Buffon, on the contrary affirms (o) that European dogs have prospered in the hot as well as the cold countries of the new world: in which affirmation he grants certainly a great superiority to the clime of America over that of the old world.

VOL. III. I i C A T S

(o) Histoire Nat. tom. x.

C A T S.

OUR philosophers say nothing in particular concerning the degeneracy of cats in America : but they ought to be comprehended in their universal assertion. Nevertheless count de Buffon, who in the passage above quoted does not admit any exception in that which he says of the degeneracy of animals in America, treating afterwards of cats in particular, after boasting those of Spain as the best of all, he affirms that these Spanish cats transported to America have preserved their fine colours, and have not in the least degenerated (*p*).

These are the quadrupeds (*q*) transported from the old to the new continent, all of which, except camels, have multiplied excessively, and have preserved without alteration their corpulence, their figure, and the perfection of their originals ; which is confirmed partly by the confession of these philosophers themselves, partly by the depositions of European authors who are impartial, judicious, and well experienced in those countries ; and partly by the notoriety also of what we have alleged, and which we trust cannot be confuted. We do not doubt that candid readers will be sensible from what we have set forth of the mistakes and contradictions of these philosophers occasioned by their ridiculous attempt to discredit the new world, the fallacy of their observations, the insufficiency of their arguments, and the rashness of their censure.

CATALOGUE

(*p*) Histoire Nat. tom. xi.

(*q*) The count de Buffon adds to the above mentioned quadrupeds transported to America the Guinea pig and the rabbit ; but affirms that those two species have prospered. With respect to mice it would certainly be a great distress to America, if they could not live in that climate.

CATALOGUE OF AMERICAN QUADRUPEDS.

S E C T. I.

Species acknowledged and admitted by the Count de Buffon.

(The Number added to each Species refers to the Volume in which the author speaks of it.)

ACOUTI, a small quadruped of Paraguay and Brazil, similar to the rabbit. The true name in the Paraguese tongue is *Acuti*, 17.

AI, a species of sloth furnished with a tail, 26.

AKOUCHI, a small quadruped of Guiana, 30.

ALCE, vulgarly called *Great-beast* (a), by the French *Elan*, by the Canadians *Orignac*, 24.

ALCO, amongst the Peruvians *Alleo*, among the Mexicans *Techichi*, a mute eatable quadruped similar to a little dog.

APAR, a species of *Tatu* or *Armadillo*, furnished with three moveable bands, 21.

APEREA, a quadruped resembling the rabbit, but without a tail, 30.

BUFFLER, or hunch-backed bull, called in Mexico *Cibolo*, a large quadruped of North America, 23.

CABASSOU, a species of *Tatu*, covered with two plates or shells, and twelve moveable bands, 21.

CABCAI, or *capibara* (b), an amphibious quadruped similar to the hog, 25.

CACHICAMO, a species of *Tatu*, covered with two plates, and nine moveable bands, 21.

CHAMOIS

(a) In America they call the Tapir or Danta the *Great-beast*.

(b) The Cabiai of Buffon is called *Capibara* or *Capiguara* by the Tucumanese nation, *Capiiba* or *Capibara* by the Paraguese, *Cappiva* by the Tamanachese, by the Chiquitans *Oquis*, and by other nations *Ghiaco*, *Ciguiri*, *Irabubi*.

CHAMOIS, 24.

CHEVRUEIL, 29.

BEAVER, 17.

STAG, II.

CHINCHE, a species of American polecat (*c*), 27.

COAITA, a species of *cercopithecus*, or ape furnished with a tail, 30.

COASO, a species of polecat.

COATI, or rather *Cuati*, a small and curious quadruped of the southern countries of America, 17.

COENDU', or rather *Cuandu*, the porcupine of Guiana or Paraguay, called in Oronoko *Arura*, 25.

COJOPOLLIN, (not Cayopollin, as count de Buffon writes it) a small quadruped of Mexico, 21.

CONEPATA, in Mexican *conepatl*, the smallest species of polecat, 27.

COQUALLINO, (these count de Buffon calls the *Cozocotecuillin* of Mexico) a quadruped similar to the squirrel, but different, 26.

COUGUAR, or *Cuguar*, a spotted wild beast of the tyger kind, 19.

FALLOW-DEER, 12, 29.

ENCOBERTADO, Tatu covered with two plates or shells and six bands, 21.

EXQUIMA, a species of *cercopithecus*, 30.

FALANGER, the name given to a small quadruped, similar to the mouse, 26.

FER

(*c*) *Cbinche* is the Spanish for bug; from whence it seems the name of this insect was given likewise to the polecat, on account of the intolerable smell it emits behind; but we do not doubt that count de Buffon has rather altered the name *Cbinghe*, by which the polecat is known in Chili; for we do not find the name *Cbinche* used to signify that quadruped in any country of America.

FER DE LANCE, a species of bat so called by Buffon, on account of a membrane which it has similar to the iron of a lance, 27.

FILANDRO of Surinam, a quadruped similar to the Marosa and *Tlacuatzin*, but different, 30.

ANT-KILLER, (*e*), a quadruped of the hot countries of America, 20.

GLUTTON, called by the Canadians *Carcaju*, a wild beast of northern countries, 27.

JAGUAR (*f*), or American tyger, 19.

JAGUARETE (*g*), or rather *Jaguarètè*, a wild beast of the tyger kind, 18.

ISATIS, a wild beast of cold countries, 27.

LAMENTIN, so the French call the *Manati*, a large animal of the sea, of lakes, and rivers, classed by Buffon among quadrupeds, although it can hardly be called *bipes*, or rather *bimanus*, 27.

SEA-LION, so Lord Anson called the greater sea-calf, which in Chili has the name of *Lame*, 27.

COMMON HARE, 13.

LYNX, 19.

LLAMA, not *lama*, as Buffon writes it, nor *glama*, as Mr. de Paw writes, the Peruvian ram, 26.

LONTRA, called by the Peruvians *Miquilo*, 14.

COMMON WOLF, called by the Mexicans *Cuetlachtlì*, 14, 19.

SEA-WOLF,

e) The Ant-killer is called by the Spaniards *oso ormiguero*, or ant-bear, although it is as unlike to a bear as a dog is to a cat. Buffon distinguishes the species of them in America. The first is called by him simply *Fourmillier*, the second *Tamman noir*, and the third *Tamandua*. The Peruvians call them *Huemari*.

(*f*) *Jagua* in the Guarani language is the common name for tygers and dogs. The Peruvians call the tygers *Uturuncu*, and the Mexicans *Ocelotl*.

(*g*) The generic name for tygers in the Guarani language is *Jaguar-etc.*

- SEA-WOLF, or smaller sea-calf, 27.
- BLACK-WOLF, different from the common wolf, 19.
- MAPACH, a curious quadruped of Mexico, 17.
- MARGAI, or Tyger-cat. This name may have been taken from the *Mbaracaja* of the Paraguese, 27.
- MARIKINA, or lion-ape, a species of *cercopithecus*, 30.
- MARMOSA, a small and curious quadruped of hot and temperate countries of America, 21.
- MARMOT, called by the Canadians *Muax*, 26.
- MICO, the smallest species of the *cercopithecus* (*b*), 30.
- MORSE, a large amphibious animal of the sea, 27.
- OCELOTL, (*i*) or leopard-cat of Mexico, 27.
- ONDATRA, (*rat musque du Canada*) a quadruped similar to the mouse, 20.
- BROWN-BEAR, 17.
- BLACK-BEAR, specifically different from the brown, 17.
- PACA, a quadruped similar to the pig in hair and grunting, but in head like a rabbit. In Brazil, *Paca*, in Paraguay *Pag*, Quito *Picuru*, and Oronoko *Accuri*, 21.
- PACO, a quadruped of South America of the same kind, not however of the same species, with the Llama. The Indian name is *Allpaca*, 26.
- PECARI, a quadruped which has upon its back a humorous gland which stinks, by many supposed to be its navel. The true names of it in different countries of America, are those of *saino*, *cojametl*, *tatabro*, and *pachira* (*l*) 20.

PEKAN,

(*b*) *Mico* in Spanish is the generic name of the *cercopithecus*, but Buffon only applies it to the smallest species.

(*i*) *Ocelotl* in Mexican is the name of the tyger; but Buffon applies it to the Leopard-cat.

(*l*) It is not improbable that the *Pecari* has been so called by Buffon from *pachira*, which is the name given to this quadruped in Oronoko. Buffon calls it also *Tayassou*, but *Tajazu*, as it should be written in the Guarani tongue, is the common name for all the species of hogs.

PEKAN, or American marten, 27.

PETIT-GRIS, a quadruped of cold countries similar to the squirrel, so called by Buffon, 20.

PILORI, (*rat musque des Antilles*) a small quadruped similar to the mouse, and different from the Ondatra, 20.

PINCHIS, (with Buffon, *Pinche*) a species of small *cercopithecus*, 30.

POLATUCA, a quadruped partly like a squirrel, called by the Mexicans *Quimichpatlan*, or flying-rat, 20.

INDIAN-PIG, (in French *porc de Inde*) a small quadruped of South America resembling the pig and rabbit, without a tail, 16.

PUMA, or American lion, called by the Mexicans *Miztli*, and in Chili *Pagi*, 18.

QUIRQUINCHO, a species of Tatu covered with a shell and eighteen bands (*m*).

REIN-DEER, in Canada *Caribu*, 24.

SAI (*n*), a species of *cercopithecus*, 30.

SAIMIRI, or rather *Caimiri*, a curious species of *cercopithecus*, 30.

SAKI, a species of *cercopithecus* with a long tail, 30.

SARICOVIENNE, particular Lontra of Paraguay, Brazil, Guiana, and Oronoko. In Paraguay it is called *Kija*, and in Oronoko *Gairo*, and *Nevi*, 27.

SAYU, (perhaps *Caju*) a species of *cercopithecus*, 30.

WATER-RAT, 30.

SURICATE, quadruped of South America, which, like the Hyena, has four toes to every foot, 26.

SVIZZERO,

(*m*) *Quirquincho*, amongst the Peruvians, *Ajotachtli*, amongst the Mexicans, *Tatu* amongst the Paraguese, and *Armadillo* amongst the Spaniards, are all generic names of these species of quadrupeds. Buffon confines the name *Quirquincho* not *Cirquincon* as he writes it to one single species; as also that of *Ajotachtli*.

(*n*) *Cai*, not *Sai* as Buffon writes it, is in the Guarani tongue the generic name of all the *Cercopithecus*; but he confines it also to one species.

SVIZZERO, called by the Mexicans *Tlalmototli*, a quadruped in form like the squirrel, but different in its mode of life, and almost twice as large, 20.

TAIRA, or weasel of Guiana.

TAMANDUA, or rather *Tamanduà*, the middling species among the Ant-killers, 26.

TAMANNOIR, the largest species of the Ant-killers, 26.

TAPET, or Tapeto, a quadruped of South America, resembling both the hare and rabbit. The true name in the Guarani language is Tapiiti, 30.

TAPIR, (o), a large quadruped of America, called by the Spaniards *Anta*, *Danta*, and *Granbestia*, and in other American languages, *Tapii*, *Tapiira*, *Beori*, *Tlacaxolotl*, &c. 23.

TARSIERE, a quadruped something like the Marmosa and *Tlacuatzin*, 29.

TATUETO, a name given by count de Buffon to that species of Tatu which is covered with two shells and eight bands, 21.

TACUATZIN, a curious quadruped, the female of which carries its young, after having brought them forth, in a bag or membrane which it has under its belly. In different countries of America it has the following names, *Chucha*, *Churcha*, *Mucamuca*, *Jarique*, *Fara*, and *Auarè*. The Spaniards of Mexico call it, *Tlacuache*. Some naturalists have given it the improper name of *Filandro*, and others, the extremely proper one of *Didelfus*. Count de Buffon calls it *Larigue* and *Cari-gue*, changing the name *Jarique*, by which it is known in Brasil. 21.

TOPORAGNO,

(o) We willingly adopt the name *Tapir*, because it is already in use among modern zoologists, and is not otherwise equivocal. That of *Great-beast* is proper to the Alce; that of *Anta* or *Danta* is likewise given to the Zebu, a quadruped of Africa very different from the Tapir.

TOPORAGNO (in the Spanish *mufaraña*), 30.

TUZA, not *Tucan*, as count de Buffon writes (*p*); in Mexican, *Tozan*; a quadruped of Mexico, of the Mole kind, but larger and more beautiful, 30.

VAMPIRO, great bat of America.

UARINA, with Buffon, *Ouarine* (*q*); great-bearded *cercopithecus*, called in Quito *Omeco*, 30.

VISON, or American pole-cat, 27.

UISTITI, species of small *cercopithecus*, 30.

UNAU, a species of sloth without tail, (*r*) 26.

Common Fox, 14.

URSON, quadruped of cold countries, similar to but different from the beaver, 25.

ZORRILLO, or Zorriglio, a species of polecat (*s*), 27.

From this catalogue we see that the count de Buffon, who could not find more than seventy species of quadrupeds in all America, in the progress of his Natural History acknowledges and distinguishes at least ninety-four; we say *at least*, as besides those above mentioned we ought to mention the common hog, the ermine, and others, which, denied by Buffon to America in some places of his history, are granted to it in others.

VOL. III.

K k

SECT.

(*p*) We know not if the Tuza is of the same species of quadruped which the Peruvians call *Tupu tupu*.

(*q*) The count de Buffon doubts whether the *Aluata* which is a *cercopithecus* of a large size, is of the same species with the *Uarina*; but we assure him it is certainly of the same species, and therefore we have not put down the *Aluata*, (which he writes *Alouate*) in this catalogue.

(*r*) The count de Buffon justly distinguishes two species of the sloth, the one furnished with a tail, the other not; because besides this they bear other different characters. In Quito they call the sloths *Quillac*, or *Quigllac*, and in Oronoko *Proto*. The Spaniards call them *Pereza*, which means slothfulness, and *Petrico ligero*, or swift dog, by way of antiphrasis.

(*s*) *Zorrillo*, or little fox, is the generic name which the Spaniards give to Polecats. The Mexicans call them *Epatl*. In Chili *Chinghe*, and in other countries of South America *Mapurito*, *Agnatuja*, &c.

S E C T. II.

Species which Count de Buffon has confounded with others that are different.

The *Guanaco* with the *Llama* or *Gliama* (t)

The *Vicugna* with the *Paco*.

The *Citli* with the *Tapete* or *Tapiiti* (u)

The *Huiztlacuatzin*, or Mexican porcupine, with the *Cuandu* or porcupine of *Guiana* (x).

The *Tlacocelotl* with the *Ocelotl* (y).

The *Tepitzcuintli*, or mountain dog of Mexico with the *Glutton* (z).

The *Xoloitzcuintli*, or bald dog with the *Wolf*.

The

(t) Besides other characters of distinction between the *Llama*, the *Guanaco*, the *Vicugna*, and *Paco*, they have never been known to copulate though put together in one place. If this circumstance is sufficient to allow us to infer a difference of species between the dog and the wolf, quadrupeds very similar in external figure and internal organization, what ought we to conclude respecting four quadrupeds which are more different from each other than the dog is from the wolf?

(u) To render ourselves certain of the difference between the *Citli* and the *Tapete* it is sufficient to compare the descriptions which Hernandez and Buffon give of each.

(x) See what we have said in the first book of our History concerning the difference between the Mexican ostrich and that of *Guiana*.

(y) The count de Buffon is desirous of persuading us that the *Tlacocelotl* and *Ocelotl* are but one same animal; the last the male, the other the female; that *Ocelotl* is the same name with *Tlacocelotl* excepting the syncope. We might as well say that *Canis* is not different from *Semicanis*, and that *Tygris* is the same as *Semitygris*, because the Mexican *Ocelotl* is the same thing with *Tygris* and *Tlacocelotl* means nothing but *Semitygris*. The count de Buffon is not blameable for not knowing the Mexican language; but neither ought he to be excused for deciding on matters in which he was ignorant. Hernandez, who saw and examined as a naturalist both those two wild animals, certainly deserves the greater credit.

(z) See what we have said respecting these three last quadrupeds in our fourth dissertation.

The *Itzcuintepozotli*, or hunch-backed dog, with the *Alco* or *Techichi*. We ought therefore to add these eight species, which he has confused with others, to the ninety-four above mentioned, which will make one hundred and two.

S E C T. III.

Species unknown, or unjustly denied by the Count de Buffon to America.

ACHUNI, *cercopithecus* of Quito, furnished with a long snout and very sharp teeth, and covered with hair like bristles. Manuscript in our possession.

AHUITZOTL, small amphibious quadruped of Mexico, described by us in our first book.

AMIZTLI, an amphibious quadruped of Mexico, described by us (a)

CACOMIZTLE, a quadruped of Mexico, similar to the pole-cat in its mode of living, but different in shape, described in our first book.

DOG of Cibola, or dog of burden, a quadruped of the country of Cibola, similar in form to a mastiff, which the Indians employ to carry burdens. Several historians of Mexico mention this strong animal.

CHICHICO, *cercopithecus* of Quito, so small that it can be held in the hand. It is found of different colours.

MS.

CHILLIHUEQUE, a large quadruped of Chili, similar to

(a) In a note of the first book of our History we said that the *Amiztli* appeared to us the same quadruped with that called by Buffon *Saricovienne*; but on farther reflection and consideration we have found those two quadrupeds specifically different.

to the Guanaco, but different. History of Chili, by Molina.

CHINCHILLA, species of woolly field-rat, mentioned by many historians of South America.

CHINCHIMEN, or sea-cat, an amphibious quadruped of the sea of Chili. Nat. Hist. of Chili.

CINOCEPHALUS *Cercopithecus*, a quadruped of Mexico, of which Hernandez, Briffon, and others make mention.

COJOTE, (in Mexico Cojotl) a wild beast described in this history.

COMMON RABBIT, called by the Mexicans *Tochtli*.

CUL, or Peruvian rabbit, a small quadruped, similar to the Indian pig, of which several historians of Peru make mention.

CULPEU, a particular species of large fox in Chili. Hist. of Chili.

DEGU, or dormouse of Chili. Ibid.

SEA-HOG, a particular species of amphibious hog of Chili, Ibid.

FERRET of Chili and Paraguay, called in Guarani *Yaguarohape*. Ibid. and MS. with us.

HONEY-CAT. Thus the Spaniards name a quadruped of the province of Chaco, in South America, similar in form to the cat, which lies in watch for birds upon trees, and is extremely fond of the honey of bees. MS. with us.

GUANQUE, a species of field-rat, of a blueish cast, in Chili. Nat. Hist. of Chili.

HORRO, great *cercopithecus* of Quito and Mexico, all black but the neck, which is white. It cries loudly in the woods, and when upright on its feet measures the height of a man. MS. with us.

HUEMUL, cloven-footed horse of Chili. Hist. of Chili.

JAGUARON,

JAGUARON, in Guarani *Jaguaru*, an amphibious wild animal of Paraguay, called by some naturalists the water tyger. MS. with us.

KIKI, quadruped of Chili, of the weazel kind. Hist. of Chili.

MAJAN, quadruped similar to a hog, which has a round body, and its bristles sticking up. It inhabits Paraguay. MS. with us.

PISCO-CUSHILLO, or *avis cercopithecus*, *cercopithecus* of Quito, which is covered from the neck to the tail with a certain kind of feathers. MS. with us.

Common **HEDGE-HOG** of Paraguay. MS. with us.

RAT, most common in America before the Spaniards landed there, and called by the Mexicans *Quimichin*. Described by us.

The common **FIELD-RAT** of Mexico and other countries of America.

TAJE, a quadruped of California, of which mention is made both in the printed history and in manuscripts of that peninsula. The *Taje* is unquestionably the *Ibex* of Pliny, described by count de Buffon under the name *Bouquetin*.

TAITETU, a quadruped of Paraguay, of the hog kind, the female of which brings forth two young which are united together by means of the navel-string. MS. by us.

WHITE BADGER of New York, described by Briffon.

THOPEL-LAME, an amphibious quadruped of the sea of Chili, a species of sea-calf, more similar still to the lion than that seen by lord Anson. History of Chili.

TLALCOJOTE, in Mexico *Tlalcojotl*, a common quadruped of Mexico, described in book i.

Common **WHITE FIELD MOUSE** of Mexico.

Common

Common FIELD MOUSE of Mexico and other countries of America.

MOUSE of Maule, a quadruped of that province, in the kingdom of Chili, similar to the Marmot, but twice as large. Hist. of Chili.

TREFLE, or *Trefoil*, a large quadruped of North America, described by Bomare.

VISCACHA of the fields, a quadruped similar to the rabbit, but furnished with a large tail turned upwards. Acosta and other historians of South America mention it.

VISCACHA of the mountains, a quadruped extremely beautiful, of the same kind with that of the fields, but different in species. MS. by us.

USNAGUA, or *Cercopithecus nocturnus* of Quito. MS. &c.

These forty species, added to those one hundred and two above mentioned, make one hundred and forty-two species of American quadrupeds. If we add to those, horses, asses, bulls, sheep, goats, common hogs, and Guinea-pigs, dogs, cats, and house mice, transported there since the conquest, we shall have at present an hundred and fifty-two species in America. Count de Buffon, who in all his Natural History does not enumerate more than two hundred species of quadrupeds in the countries of the world hitherto discovered, in his work entitled, *Epoches de la Nature*, reckons now three hundred; so large has the increase been in the space of a few years! But now that they are three hundred, America, although it does not make more than a third part of the globe, has notwithstanding almost one half of the species of its quadrupeds. We repeat *almost*, because we have omitted all those of which we are in doubt

doubt whether they are different from those described by Buffon. Our principal aim in forming this catalogue has not been to shew the mistakes of the count de Buffon in his enumeration of American quadrupeds, and the error of his opinions concerning the imagined scarcity of matter in the new world, but to be of some service to European naturalists by pointing out to them some quadrupeds hitherto unknown, and removing in some degree those difficulties which have been occasioned by indistinct appellations of them. They might desire to have exact descriptions along with them, and even in this we should be willing to contribute every thing in our power, were it not foreign to our purpose. In order to make this catalogue, besides the great study in which it has engaged us, we have obtained written informations from persons of learning and accuracy of knowledge, experienced in different countries of America, for whose obliging communications we owe them the greatest acknowledgments.

DISSERTATION V.

On the Physical and Moral Constitution of the Mexicans.

IN Mexico and the other countries of America four classes of men may be distinguished. First, The proper Americans, commonly called Indians, or those who are descended of the ancient peoplers of that new world, and have not mixed their blood with the people of the old continent. Secondly, The Europeans, Asiatics and Africans established in those countries. Thirdly, The sons or descendants of them who have been called by the Spaniards *Criollos*, that is *Creoles*, although the name principally belongs to those descendants of Europeans whose blood has not been mixed with that of the Americans, Asiatics, or Africans. Fourthly, The mixed breeds called by the Spaniards *castas*, that is those who are born or descended of an European and an American, or from an European and an African, or from an African and American, &c. All those classes of men have been fated to meet with the contempt and defamation of Mr. de Paw. He supposes or feigns the climate of the new world to be so malignant as to cause the degeneracy of not only the Creoles and proper Americans who are born in it, but also those Europeans who reside there, although they have been born under a milder sky, and a climate more favourable, as he imagines, to all animals. If Mr. de Paw had written his philosophical researches in America, we might with reason apprehend the degeneracy of the human species under the climate of America; but as we find that work and many others of the same stamp produced in Europe, we are confirmed

ed by them in the truth of the Italian proverb taken from the Greek, *Tutto il mondo è paese*. But leaving aside the prejudices and prepossessions of that philosopher and his partizans against the other classes of men, we shall only treat of that which he has written against the native Americans, as they are the most injured and the least defended. If in the writing of this Dissertation we had given way to interest or passion, we would rather have undertaken the defence of the Creoles, which, besides that it would have been more easy, should naturally have interested us more. We are descended of Spanish parents, we have no affinity or relation to the Indians, nor can we hope for any recompense from their misery: our motive is the love of truth, and the cause of humanity.

S E C T. I.

Of the Corporeal Qualities of the Mexicans.

Mr. de Paw, who finds fault with the stature, the formation, and the supposed irregularities of the animals of America, has not been more indulgent towards its men. If the animals appeared to him a sixth part less in size than those of Europe, the men, as he reports, are also smaller than the Castilians. If in the animals he remarked the want of tail, in the men he complains of the want of hair. If in the animals he found many striking deformities, in the men he abuses the complexion and shape. If he believed that the animals there, were not so strong as those of the old continent, he affirms, in like manner, that the men are feeble in extreme, and subject

to a thousand distempers occasioned by the corruption of the air and the stench of the soil.

Concerning the stature of the Americans he says, in general, that although it is not equal to the stature of the Castilians, there is but little difference between them. But we are confident, and it is notorious through the whole of New Spain, that the Indians who inhabit those countries, lying between nine and forty degrees of north latitude, which are the limits of the discoveries of the Spaniards, are more than five Parisian feet in height, and that those who do not reach that stature are as few in number amongst the Indians as they are amongst the Spaniards. We are certain besides, that many of those nations, as the *Apaches*, the *Hiaquefe*, the *Pimese*, and *Cochimies*, are at least as tall as the tallest Europeans; and we are not conscious, that in all the vast extent of the new world, a race of people has been found, except the Esquimaux, so diminutive in stature as the Laplanders, the *Samojeds*, and Tartars, in the north of the old continent. In this respect, therefore, the inhabitants of the two continents are upon an equality.

In regard to the regularity and proportion of the limbs of the Mexicans, we do not need to say more than we have already said in our first book. We are persuaded, that among all those who may read this work in America, no one will contradict the description we have given of the shape and character of the Indians, unless he views them with the eye of a prejudiced mind. It is true, that Ulloa says, in speaking of the Indians of Quito, he had observed, “that imperfect people abound-
“ed among them, that they were either irregularly
“diminutive, or monstrous in some other respect, that
“they became either insensible, dumb, or blind, or want-
“ed

“ed some limb of their body :” but having ourselves made some enquiry respecting this singularity of the Quitans, we were informed by persons deserving of credit, and acquainted with those countries, that such defects were neither caused by bad humours, nor by the climate, but by the mistaken and blind humanity of their parents, who, in order to free their children from the hardships and toils to which the healthy Indians are subjected by the Spaniards, fix some deformity or weakness upon them, that they may become useless : a circumstance of misery which does not happen in other countries of America, nor in those places of the same kingdom of Quito, where the Indians are under no such oppression. M. de Paw, and, in agreement with him, Dr. Robertson, says, that no deformed persons are to be found among the savages of America ; because, like the ancient Lacedemonians, they put to death those children which are born hunch-backed, blind, or defective in any limb ; but that in those countries where they are formed into societies, and the vigilance of their rulers prevents the murder of such infants, the number of their deformed and irregular individuals is greater than it is in any other country of Europe. This would make an exceeding good solution of the difficulty if it were true : but if, possibly, there has been in America a tribe of savages who have imitated the barbarous example (*a*) of the celebrated Lacedemonians, it is certain that those authors have no grounds to impute such inhumanity to the rest of the Americans ; for that it has not been the practice, at least with the far greater part of those nations, is to
be

(*a*) That inhuman practice of killing children which were born deformed, was not only permitted in Rome, but was prescribed by the laws of the Twelve Tables. *Pater insignem ad deformitatem puerum cito necato.*

be demonstrated from the attestations of the authors the best acquainted with their customs. Besides, in all the countries of Mexico, or New Spain, which make at least one fourth of the new world, the Indians lived in societies together, and assembled in cities, towns, and villages, under the care of Spanish or Creole magistrates and governors, and no such instances of cruelty towards their infants are ever seen or heard of; yet deformed people are so uncommon, that all the Spaniards and Creoles, who came from Mexico to Italy, in the year 1768, were then, and are still much surprised to observe the great number of blind, hunch-backed, lame, and otherwise deformed people, in the cities of that cultivated peninsula. The cause of this phenomenon, which so many writers have observed among the Americans, must therefore be different from that to which the above mentioned authors would impute it.

No argument against the new world can be drawn from the colour of the Americans; because their colour is less distant from the white of the Europeans than it is from the black of the Africans, and a great part of the Asiatics. The hair of the Mexicans, and of the greater part of the Indians, is, as we have already said, coarse and thick; on their face they have little, and in general (*b*) none on their arms and legs: but it is an error to say, as M. de Paw does, that they are entirely destitute of hair in all the other parts of their body. This is one of the many passages of the Philosophical Researches, at which the Mexicans, and all the other nations, must smile to find an European philosopher so eager to divest them of the dress they had from nature. He read, without
doubt,

(*b*) We say, in general, because there are Americans in Mexico who are bearded, and have hair on their arms and limbs.

doubt, that ignominious description, which Ulloa gives of some people of South America (*c*), and from this single premise, according to his logic, he deduces his general conclusion.

The very aspect of an Angolan, Mandingan, or Congan, would have shocked Mr. de Paw, and made him recall that censure which he passes on the colour, the make, and hair of the Americans. What can be imagined more contrary to the idea we have of beauty, and the perfection of the human frame, than a man whose body emits a rank smell, whose skin is as black as ink, whose head and face are covered with black wool, instead of hair, whose eyes are yellow and bloody, whose lips are thick and blackish, and whose nose is flat? Such are the inhabitants of a very large portion of Africa, and of many islands of Asia. What men can be more imperfect than those who measure no more than four feet in stature, whose faces are long and flat, the nose compressed, the *irides* yellowish black, the eye-lids turned back towards the temples, the cheeks extraordinarily elevated, their mouths monstrously large, their lips thick and prominent, and the lower part of their visages extremely narrow? Such, according to count de Buffon (*d*), are the Laplanders, the Zemblans, the *Borandines*, the *Samojeds*, and Tartars in the East. What objects more deformed than men whose faces are too long and wrinkled even in their youth, their noses thick and compressed, their eyes small
and

(*c*) Ulloa, in the description which he gives of the Indians of Quito, says, that hair neither grows upon the men nor upon the women when they arrive at puberty, as it does on the rest of mankind; but whatever singularity may attend the Quitans, or occasion this circumstance, there is no doubt that among the Americans in general, the period of puberty is accompanied with the same symptoms as it is among other nations of the world.

(*d*) Hist. Nat. tom. vi.

and sunk, their cheeks very much raised, the upper jaw low, their teeth long and disunited, their eye-brows so thick, that they shade their eyes; the eye-lids thick, some bristles on their faces instead of beard, large thighs and small legs? Such is the picture count de Buffon gives of the Tartars, that is of those people who, as he says, inhabit a tract of land in Asia, twelve hundred leagues long and upwards, and more than seven hundred and fifty broad. Amongst these the Calmucks are the most remarkable for their deformity, which is so great, that, according to Tavernier, they are the most brutal men of all the universe. Their faces are so broad that there is a space of five or six inches between their eyes, according as count de Buffon himself affirms. In Calicut, in Ceylon, and other countries of India, there is, say Pyrard and other writers on those regions, a race of men who have one or both of their legs as thick as the body of a man; and that this deformity among them is almost hereditary. The Hottentots, besides other gross imperfections, have that monstrous irregularity attending them, of a callous appendage extending from the os pubis downwards, according to the testimony of the historians of the Cape of Good Hope. Struys, Gemelli, and other travellers affirm, that in the kingdom of Lambry, in the islands of Formosa, and of Mindoro, men have been found with tails. Bomare says (*e*), that a thing of this kind in men is nothing else than an elongation of the *os coccygis*; but what is a tail in quadrupeds but the elongation of that bone, though divided into distinct articulations (*f*)? However it may be, it is certain, that that elongation

(*e*) Diction. de Histoire. Nat. v. Homme.

(*f*) See Heister. Anat. de *Ossibus trunci*.

elongation renders those Asiatics fully as irregular as if it was a real tail.

If we were, in like manner, to go through the nations of Asia and Africa, we should hardly find any extensive country where the colour of men is not darker, where there are not stronger irregularities observed, and grosser defects to be found in them, than M. de Paw finds fault with in the Americans. The colour of the latter is a good deal clearer than that of almost all the Africans, and the inhabitants of southern Asia. The scantiness of beard is common to the inhabitants of the Philippine Islands, and of all the Indian Archipelago, to the famous Chinese, Japanese, Tartars, and many other nations of the old continent. The imperfections of the Americans, however great they may be represented to be, are certainly not comparable with the defects of that immense people, whose character we have sketched, and others whom we omit. All these circumstances might have restrained the pen of M. de Paw, but they slipped his memory, or he shut out the recollection of them.

M. de Paw represents the Americans to be a feeble and diseased set of nations : Ulloa, on the contrary affirms, that they are healthy, robust, and strong. Which of the two merits the greater credit ? M. de Paw, who undertook at Berlin to review the Americans without knowing them ; or Ulloa, who resided amongst them for some years, and conversed with them in different countries of South America ; M. de Paw, who employed himself to degrade and debase them, in order to establish his absurd system of degeneracy, or Ulloa, who, though by no means favourable in general to the Indians, was not bent on forming any system, but only on writing what he judged

judged to be true? The impartial reader will decide this question.

M. de Paw, in order to demonstrate the weakness and disorder of the physical constitution of the Americans, adduces several proofs, which we ought not to omit. These are, 1. That the first Americans who were brought to Europe went mad during their voyage, and their madness continued till death. 2. That grown men in many parts of America have milk in their breasts. 3. That the American women are delivered with great facility, have an extraordinary plenty of milk, and the periodical evacuation of blood is scanty and irregular. 4. That the least vigorous European conquered in wrestling any American whatever. 5. That the Americans could not bear the weight of a light burden. 6. That they were subject to the venereal distemper, and other endemic diseases.

With regard to the first proof, we deny it as being altogether false and inconsistent. Mr. de Paw says, on the faith of the Fleming Dappers, that the first Americans whom Columbus brought with him in 1493, were going to kill themselves during the voyage, but that having been bound in order to prevent them from doing so, they ran mad, and their madness lasted while they lived; that when they entered into Barcelona, they frightened the citizens to such a degree with their howls, their contortions, and their convulsive motions, that they were thought to be delirious. We have never seen the work of Dappers, but we have no doubt that his account is a string of fables; for we do not find, that either any of his cotemporary authors, nor those who wrote in the years immediately following, make any mention of such an event; but, on the contrary, from
what

what they say, it is easy to demonstrate the falsity of his story. Gonzalez Hernandez Oviedo, who was in Barcelona when Columbus arrived, saw, and knew those Americans, and was an eye-witness of what happened, says nothing of their madness, their howls, and contorsions, which he would not naturally have omitted had they been true, as he was rather unfavourable to the Indians, as we have said before, particularly when he was minutely relating their entry into that city, their baptism, their names, and in part their end. He says, that Columbus brought with him, from the island of Hispaniola, ten Americans, one of which died on the passage, three remained sick in Palos, a port of Andalusia, where, as he imagines, they died soon after, and the other six came to Barcelona, where the court was then held; that they were well instructed in the Christian doctrines and baptised: Peter Martyr, of Aighera, who was also in Spain when Columbus arrived, makes mention of the Indians (*k*) which that famous admiral brought with him, but does not say a word about their madness: on the contrary, he relates, that when Cortes returned to Hispaniola, he carried back three of the Indians with him, as all the others had died by that time, from change of air and food (*l*); and that he employed one of them to

VOL. III.

M m

gain

(*k*) Sommar. della Stor. delle Ind. Occid. cap. 4.

(*l*) To the causes of the death of those Americans, mentioned by P. Martyr, may be added the extraordinary hardships they suffered in that horrid voyage, the circumstances of which are to be found in the letters of Columbus, published by his son. From the number of those who died, mentioned by Martyr, an exception ought to be made of that American whom the prince Don John retained with him, as he did not die till two years after, according to the testimony of Oviedo. But although they had all died on the voyage, or become frantic and mad, it should not cause any wonder, considering what is recited by M. de Paw himself, in Part iii. sect. 2. of his Researches: "Les

"academiciens

gain information of the state of the Spaniards whom he had left in that island. Ferdinand Columbus, a learned and diligent writer of the life of Christopher Columbus his father, who happened also to be in Spain at that time, makes a minute detail of the voyages and actions of his glorious parent, speaks of the Indians whom he had seen, and relates nothing more of them than P. Martyr. The account given by Dappers, therefore, is false, or at least we will say, that madmen learned the Spanish language, that the Catholic kings chose madmen to be with them, to amuse them with their horrible howls; and lastly, that Columbus, the prudent Columbus, made use of one of these madmen, to gain information of all that had happened to the Spaniards in Hispaniola while he had been absent.

The anecdote of milk in the breasts of the Americans is one of the most curious which we read in the Philosophical Researches, and most worthy to excite our smiles, and the mirth of all the Americans: but it is necessary to confess, that Mr. de Paw has shewn more moderation than many others whom he has quoted. The celebrated naturalist Johnston, affirms, in his *Thaumattographia*, on the faith of we know not what travellers, that in the new world almost all the men abound with milk in their breasts. In all Brasil, says the author of the Historical Researches, the men alone suckle children, for the women have hardly any milk. We do not know whether most to admire the effrontery and impudence of those travellers

“academiciens Francois,” he says, “enleverent au de la de Torneo deux Lappons, qui, obsédés et martyrisés par ces philosophes, moururent de desespoir en route.” Neither the country which the Laplanders left, nor the voyage which they had to make, can be compared with the country and the voyage of those Americans; nor can we imagine the Spanish sailors, of the fifteenth century, so humane as the French academicians of the eighteenth.

vellers who invent and publish such fables, or the excess of simplicity in those who repeat them. If there had ever been a nation of the new world, in which such a phenomenon had been observed (which M. de Paw cannot prove), that certainly would not have been sufficient to say, that in many places of America milk abounds in the breasts of men; and much less to affirm, as Johnston does, of almost all the men in the new world.

Those singularities, which Mr. de Paw remarks in the American woman, would be most acceptable to them if they were true; for nothing certainly could be more desirable to them, than to be freed from the pains and difficulties of child-bearing, to abound with that liquor which nourishes their children, and to be spared the inconveniencies which are occasioned by those periodical and disagreeable evacuations? But that which would be esteemed by them a circumstance of happiness, is reported by M. de Paw as a proof of their degeneracy; for that ease of delivery, he says, shews the expansion of the vaginal passage, and the relaxation of the muscles of the matrix, on account of the fluids being too copious: their abundance can only proceed from the humidity of their constitutions, and that, otherwise, they do not conform with the women of the old continent; whereas they, according to M. de Paw's legislation, are the model of all the world. Surely it must excite the wonder of every one, that whereas the author of the *Historical Researches* remarks such a scarcity of milk in the American women, that the men are obliged to suckle their own children; the author of the *Philosophical Researches* on the contrary, should attribute to them such an extraordinary abundance of it; and who is there, that in reading these and other similar contradictions and tales
published

published in Europe, particularly a few years back, will not discover that the travellers, historians, naturalists, and philosophers of Europe, have made America the magazine of their fables and fictions ; and in order to render their works more entertaining, from the marvellous novelty of their pretended observations, have ascribed to all the Americans, whatever singularities have been observed in one individual, or perhaps in none ?

The American women are subject to the common sentence of nature, and are not delivered without pains ; possibly, not with so much apparatus as attends the women of Europe ; because they are less delicate, and more accustomed to the inconveniences of life. Thevenot says, that the Mogul women are delivered with great ease, and that the day after they are seen going through the streets of the cities, and yet there is no reason to find fault with their fruitfulness, or their constitution.

The quantity and quality of milk in the American women in Mexico, and other countries of America, are well known to the European and Creole ladies, who take them commonly as wet-nurses to their children ; they find that they are wholesome, faithful, and diligent, in such service. Nor does it matter to say, that the ancient Americans are talked of, and not the moderns, as M. de Paw has sometimes replied to his adversary Don Perney ; since besides, that his propositions against the Americans are all meant of the present day, as it is manifest to every one who has read his work, that distinction has no place in many countries of America, and particularly in Mexico. The Mexicans use, for the most part, the same food which they fed upon before the conquest. The climate, if possibly it is changed in some regions, from the cutting down of the woods, and the draining of stagnant waters,

waters, in Mexico is still the same. Those who have compared, as we have, the accounts of the first Spaniards, with the present state of that kingdom, know that the same lakes, the same rivers, and, in general, the same woods, still subsist.

With respect to the *menfes* of the American women, we can give no account, nor do we know who can. M. de Paw, who has from Berlin seen so many things of America, has, perhaps, found, in some French author, the manner of knowing that which we neither can, nor choose to enquire into. But granting that the menstrual evacuation of the American women is scanty and irregular, it argues nothing against their constitution, as the quantity of that evacuation depends, as count de Buffon justly observes, on the quantity of their aliment, and insensible perspiration. Women who eat much, and take little exercise, have abundant *menfes*. In hot countries, where perspiration is more copious than it is in cold, that evacuation is more sparing. If the scantiness of such evacuation can proceed from sobriety in eating, from the heat of the clime and exercise, why produce it as an argument of a bad constitution? Besides, we do not know how to reconcile that scantiness of the *menfes* with the superabundance of fluids, which M. de Paw supposes in the women of America, to be a consequence of the disorder of their physical constitution.

The proofs above mentioned of the weakness of the Americans, are not better supported. M. de Paw says, that they were overcome in wrestling by all the Europeans, and that they sunk under a moderate burden; that by a computation made, two hundred thousand Americans were found to have perished in one year from carrying of baggage. With respect to the first point, it would

would be necessary that the experiment of wrestling was made between many individuals of each continent, and that the victory should be attested by the Americans as well as the Europeans. But however that may be, we do not pretend to maintain, that the Americans are stronger than the Europeans. They may be less strong without the human species having degenerated in them. The Swiss are stronger than the Italians, and still we do not believe the Italians are degenerated, nor do we tax the climate of Italy. The instance of two hundred thousand Americans having died in one year, under the weight of baggage, were it true, would not convince us so much of the weakness of the Americans, as of the inhumanity of the Europeans. In the same manner that those two hundred thousand Americans perished, two hundred thousand Prussians would also have perished had they been obliged to make a journey of between three and four hundred miles, with a hundred pounds of burden upon their backs; if they had collars of iron about their necks, and were obliged to carry that load over rocks and mountains; if those who became exhausted with fatigue, or wounded their feet so as to impede their progress, had their heads cut off that they might not retard the pace of the rest; and if they were not allowed but a small morsel of bread to enable them to support so severe a toil. The same author (*m*) from whom M. de Paw got the account of the two hundred thousand Americans who died under the fatigue of carrying baggage, relates also all the above mentioned circumstances. If that author therefore is to be credited in the last, he is also to be credited in the first. But a philosopher

(*m*) Las Casas.

philosopher who vaunts the physical and moral qualities of the Europeans over those of the Americans, would have done better, we think, to have suppressed facts so opprobrious to the Europeans themselves. It is true, that neither Europe in general, nor any nation of it in particular, can be blamed for the excesses into which some individuals run, especially in countries so distant from the metropolis, and when they act against the express will and repeated orders of their sovereigns; but if the Americans were disposed to make use of M. de Paw's logic, they might from such premises deduce universal conclusions against the old continent in the same manner, as he is continually forming arguments against the whole of the new world, from what has been observed in some particular people, or possibly only in some individuals.

He allows the Americans a great agility of body, and swiftness in running; because they are accustomed from childhood to this exercise: neither then ought he to deny them strength; for, as it is clear from their history and from their paintings, that as soon as they could walk, they were habituated to carry burdens, in which occupation they were to be employed all their lives; in like manner no other nation ought to be more vigorous in carrying burdens, because no other exercised itself so much as the Americans in carrying loads on their backs, on account of their want of beasts of burden (*n*), with which other nations were provided. If Mr. de Paw had seen, as we have, the enormous weights which the Americans

(*n*) Although the Peruvians had beasts of burden these were not such as could serve them in transporting those large stones which were found in some of their buildings, and in those of Mexico: having no machines either for assisting them in that work, it must have been done solely by the strength of men.

ricans support on their shoulders, he would never have reproached them with feebleness.

But nothing demonstrates so clearly the robustness of the Americans as those various and lasting fatigues in which they are continually engaged. Mr. de Paw says (o), that when the new world was discovered, nothing was to be seen but thick woods; and that at present there are some lands cultivated, not by the Americans however, but by the Africans and Europeans; and that the soil in cultivation is to the soil which is uncultivated as two thousand to two millions. These three assertions are precisely as many errors. To reserve, however, what belongs to the labours of the ancient Mexicans for another Dissertation, and to speak only of latter times, it is certain that since the conquest the Americans alone have been the people who have supported all the fatigues of agriculture in all the vast countries of the continent of South America, and in the greater part of those of South America subject to the crown of Spain. No European is ever to be seen employed in the labours of the field. The Moors, who, in comparison of the Americans, are very few in number in the kingdom of New Spain, are charged with the culture of the sugar-cane and tobacco, and the making of sugar; but the soil destined for the cultivation of those plants is not with respect to all the cultivated land of that country in the proportion of one to two thousand. The Americans are the people who labour on the soil. They are the tillers, the sowers, the weeders, and the reapers of the wheat, of the maize, of the rice, of the beans, and other kinds of grain and pulse, of the cacao, of the vanilla, of the cotton, of the indigo, and all other plants useful to the sustenance,

(o) *Défence de Recherches*, cap. xii.

sustenance, the clothing, and commerce of those provinces; and without them so little can be done, that in the year 1762, the harvest of wheat was abandoned in many places on account of a sickness which prevailed and prevented the Indians from reaping it. But this is not all; the Americans are they who cut and transport all the necessary timber from the woods; who cut, transport, and work the stones; who make lime, plaster, and tiles; who construct all the buildings of that kingdom, except a few places where none of them inhabit; who open and repair all the roads, who make the canals and sluices, and clean the cities. They work in many mines of gold, of silver, of copper, &c. they are the shepherds, herdsmen, weavers, potters, basket-makers, bakers, couriers, day-labourers, &c.; in a word, they are the persons who bear all the burden of public labours. These are the employments of the weak, dastardly, and useless Americans, while the vigorous M. de Paw and other indefatigable Europeans are occupied in writing invectives against them.

These labours, in which the Indians are continually employed, certainly attest their healthiness and strength; as, if they are able to undergo such fatigues, they cannot be diseased, nor have an exhausted stream of blood in their veins, as M. de Paw insinuates. In order to make it believed that their constitutions are vitiated, he copies whatever he finds written by historians of America whether true or false, respecting the diseases which reign in some particular countries of that great continent; and especially concerning the venereal distemper, which he conceives to be truly American. With respect to the venereal disorder, we shall treat of it at large in another Dissertation: concerning other diseases, we

grant, that in some countries in the wide compass of America men are exposed more than elsewhere to the distempers which are occasioned by the intemperature of the air, or the pernicious quality of the aliments; but it is certain according to the assertion of many respectable authors acquainted with the new world, that the American countries are for the most part healthy; and if the Americans were disposed to retaliate on M. de Paw and other European authors who write as he does, they would have abundant subject of materials to throw discredit on the clime of the old continent, and the constitution of its inhabitants in the endemic distempers which prevail there, such as the *elephantiasis* and leprosy of Egypt and Syria (*p*), the *verben* of southern Asia, the *dragoncello* or worm of Medina, the *pircal* of Malabar, the yaws or Guinea-evil, the *tiriasi* or *morbis pedicularis* of Little Tartary, the scurvy and dysentery of northern countries, the *plica* of Poland, the goiters of Tyrol and many Alpine countries, the itch, rickets, the small-pox (*q*), and above all the plague, which has so often

(*p*) The *elephantiasis*, an endemic disease of Egypt, and entirely unknown in America, was so common in Europe in the thirteenth century, that there were, according to what Mathew Paris says, an exact writer of that time, nineteen thousand hospitals for it.

(*q*) The small-pox was carried to America by the Europeans, and made as great a havoc there as the venereal disease did in Europe. The rickets is a distemper unknown in the new world; this we conceive the principal cause of there being fewer deformed and imperfect shaped people there than in Europe. The itch exists either not at all, or so rarely, that during many years residence in different countries of Mexico, we never saw one infected with that disease, nor ever heard of any one who was. The *vomito prieto*, which appears to be an endemic distemper also, is extremely modern, and is not felt except in some places of the torrid zone frequented by Europeans. The first who were seized with it were the sailors of some European vessels, who immediately after the bad diet they had during their voyage, eat greedily of fruit, and drank immoderately of brandy. Ulloa affirms, that in Carthagena, one of the most unhealthy

often depopulated whole cities and provinces of the old continent, and which annually commits immense havoc in the East : the most terrible scourge of the human race, but hitherto warded off from the new world.

Lastly, The supposed feebleness and unsound bodily habit of the Americans do not correspond with the length of their lives. Among those Americans whose great fatigues and excessive toils do not anticipate their death, there are not a few who reach the age of eighty, ninety, and an hundred years ; and, what is more, without there being observed in them that decay which time commonly produces in the hair, in the teeth, in the skin, and in the muscles of the human body. This phenomenon, so much admired by the Spaniards who reside in Mexico, cannot be ascribed to any other cause than the vigour of their constitutions, the temperance of their diet, and the salubrity of their clime. Historians, and other persons who have sojourned there for many years, report the same thing of other countries of the new world. But if possibly there is any region where life is not so much prolonged, at least there is no one where it is so much shortened as in Guinea, in Sierra Leona, in the Cape of Good Hope, and other countries of Africa, in which old age commonly begins at forty ; and he who arrives at fifty is looked upon as an octogenary is with us (*r*).

Of

healthy places of America, this distemper was not known before the year 1729, and that it began among the crews of the European vessels, which arrived there under the command of D. D. Giustiniani.

(*r*) The Hottentots, says Buffon, are short livers, for they hardly exceed forty years of age. Drack attests that certain nations inhabiting the frontiers of the Ethiopian districts, on account of the scarcity of aliment, feed on salted locusts, and that this wretched food produces a horrid effect ; when they arrive at the age of forty, certain flying insects breed upon their bodies, which soon occasion their deaths, by devouring first their belly, then their breast, and lastly their very bones. These, and the kind of insects by which, as M. de Paw himself confesses,

Of them it might be said with some shew of reason, that their blood is wasted, and their physical constitution is overthrown.

S E C T. II.

On the mental Qualities of the Mexicans.

HITHERTO we have examined what M. de Paw has said concerning the corporeal qualities of the Americans. Let us now see what are his speculations concerning their minds. He has not been able to discover any other characters than a memory so feeble, that to-day they do not remember what they did yesterday; a capacity so blunt, that they are incapable of thinking, or putting their ideas in order; a disposition so cold, that they feel no excitement of love; a dastardly spirit, and a genius that is torpid and indolent. In short, he paints the Americans in such colours, and debases their souls to such a degree, that although he sometimes inveighs against them, that they put their very rationality in doubt, we do not doubt, that if he had then been consulted, he would have declared himself contrary to the opinion of *rationalists*. We know well that many other Europeans, and, what is still more wonderful, many of those children or descendants of Europeans who are born in America, think as M. de Paw does; some from ignorance, some from want of reflection, and others from hereditary prejudice and prepossession. But all this and more would not be sufficient to belie our own experience and the testimony of other

confesses, the inhabitants of Little Tartary are destroyed, are certainly greatly worse than those worms which he says, are found amongst some people of America.

other Europeans whose authority has a great deal more weight, both because they were men of great judgment, learning, and knowledge of these countries, and because they gave their testimony in favour of strangers against their own countrymen. The attestations and arguments which we could adduce in favour of the mental qualities of the Americans are so numerous, that they would fill a great volume; we shall, however, to avoid prolixity or confusion, confine ourselves to a few, which are worth a thousand others.

Zumarraga, first bishop of Mexico, a prelate of happy memory and highly esteemed by the catholic kings, for his learning and irreproachable life, his pastoral zeal and apostolic labours, in his letter written in the year 1531, to the general chapter of the P. P. Franciscans, assembled in Tolosa, speaks thus of the Indians: "They are temperate and ingenious, particularly in the art of painting. They are not ungifted with mental talents. The Lord be praised for all." If M. de Paw does not value the testimony of this most venerable prelate, whom he calls a bigot and barbarian, in right of that authority which he has arrogated to himself to injure those whose sentiments are not conformable to his extravagant system of degeneracy, let him read what Las Casas, the first bishop of Chiapa, has written, who knew them well, from having resided many years in different parts of America. He in a memorial presented to Philip II. speaks of them thus: "The Americans also are people of a bright and lively genius, easy to be taught and to apprehend every good doctrine, extremely ready to embrace our faith and virtuous customs, and the people of all others in the world who feel least embarrassment in it." He makes use almost of the same expressions in his refutation
of

of the answers of Dr. Sepulveda ; “ The Indians have,” he says, “ as good an understanding and acute a genius, “ as much docility and capacity for the moral and speculative sciences, and are, in most instances, as rational “ in their political government, as appears from many “ of their extremely prudent laws, and are as far advanced in the knowledge of our faith and religion, in “ good customs and civilization where they have been “ tutored by persons of religious and exemplary life, and “ are arriving at refinement and polish as fast as any nation ever did since the times of the apostles.” Since M. de Paw believes all that which this learned exemplary prelate wrote against the Spaniards, although he was not present at the greater part of the facts which he relates, he ought much more to believe that which the same bishop, deposes in favour of the Americans, as an eye-witness and resident among them ; as there is much less requisite to make us believe that the Americans are people of a good genius and disposition, than to persuade us of those horrid and unheard of cruelties of the Spanish conquerors.

But if he does not admit the testimony of that great bishop, because he esteems him, though wrongfully, to have been a cheat, and ambitious hypocrite, he may read the deposition concerning them of the first bishop of Tlascala, Garces, a most learned man, and highly and justly esteemed by his famous patron Ant. de Nebrija, the restorer of letters in Spain. This renowned prelate in his Latin Letter to pope Paul III. written in 1536, after ten years continual commerce with, and observation of the Americans, among many praises which he bestows on their dispositions, and the gifts of their minds, he extols their genius, and in some degree raises it above that

that of his countrymen, as may appear from the passage of his letter which we have subjoined here below (s). What person is there who would not give greater faith to those three bishops, who, besides their probity, their learning, and character, had long commerce with the Americans, than to other authors who either never saw the Americans, or viewed them without reflection, or paid improper and unjust deference to the informations of ignorant, prejudiced, or interested men?

But lastly, if M. de Paw refuses the depositions of these three witnesses, however respectable, because they were ecclesiastics, to whom he thinks weakness of mind attached, he cannot but submit to the judgment of the famous bishop of Angelopoli, Palafox. Mr. de Paw, though a Prussian and a philosopher, calls that prelate *the venerable servant of God*. If he gives so much faith to this *venerable servant of God* in what he wrote against the Jesuits in his own cause, why not believe him in what he has written in favour of the Americans! Let him read the work of this prelate, composed in order to demonstrate the disposition, genius, and virtues of the Indians.

Notwithstanding the implacable hatred which M. de Paw bears to the ecclesiastics of the Roman church, and to the Jesuits in particular, he praises the Natural and Moral History of Acoſta, and calls it very justly *an excellent*

(s) "Nunc vero de horum figillatim hominum ingenio, quos vidimus ab hinc decennio, quo ego in Patria conversatus eorum potui perspicere mores ac ingenia persecutari, testificans coram te, Beatissime Pater qui Christi in terris Vicarium agis quod vidi quod audiavi et manus nostræ contrectaverunt de his pro-
genitis ab ecclesia per qualecumque ministerium meum in verbo vitæ quod singula singulis referendo, id est paribus paria, rationis optimæ compotes sunt et integri sensus ac capitis sed insuper nostratibus pueri istorum et vigore spiritus et sensuum vivacitate dexteriore in omni agibili et intelligibili præstantiores res reperiuntur."

cellent work. This judicious, impartial, and very learned Spaniard, who saw and observed with his own eyes the Americans in Peru as well as Mexico, employs the whole sixth book of this *excellent* work in demonstrating the good sense of the Americans by an explanation of their ancient government, their laws, their histories in paintings and knots, calendars, &c. to be informed of his opinion on this subject, it will be sufficient to read the first chapter of that book. We request M. de Paw, as well as our readers, to read it attentively, as there are matters in it worthy of being known. M. de Paw will discover there the origin of the error into which he, and many Europeans, have fallen, and will perceive the great difference there is between viewing things while the light is dimmed by passion and prejudices, and examining them with impartiality and cool judgment. M. de Paw thinks the Americans are bestial; Acosta, on the other hand, reputes those persons weak and presumptuous who think them so. M. de Paw says, that the most acute Americans were inferior in industry and sagacity to the rudest nations of the old continent. Acosta extols the civil government of the Mexicans above many Republics of Europe. M. de Paw, finds in the moral and political conduct of the Americans, nothing but barbarity, extravagance, and brutality; and Acosta finds there, laws that are admirable and worthy of being preserved for ever. To which of these two authors our greatest faith is due, the impartial reader will decide.

We cannot here avoid the insertion of a passage of the Philosophical Researches, in which the author discovers his turn for defamation as well as enmity to truth. "At first, he says, the Americans were not believed to be men, but rather satyrs, or large apes, which might be
" murdered

“ murdered without remorse or reproach. At last, in
“ order to add insult to the oppression of those times, a
“ pope made an original bull, in which he declared, that
“ being desirous of founding bishopricks in the richest
“ countries of America, it pleased him, and the Holy
“ Spirit, to acknowledge the Americans to be true men :
“ in so far, that without this decision of an Italian, the
“ inhabitants of the new world would have appeared,
“ even at this day, to the eyes of the faithful, a race of
“ equivocal men. There is no example of such a deci-
“ sion, since this globe has been inhabited by men and
“ apes.” We should rejoice that there was no other ex-
ample in the world of such calumnies and insolence as
those of M. de Paw, but that we may put the complex-
ion of this passage in its true light, we shall give a copy
of that decision, after having explained the occasion
of it.

Some of the first Europeans who established them-
selves in America, not less powerful than avaricious, de-
sirous of enriching themselves to the detriment of the
Americans, kept them continually employed, and made
use of them as slaves ; and in order to avoid the re-
proaches which were made them by the bishops and mis-
sionaries who inculcated humanity, and the giving liber-
ty to those people, to get themselves instructed in reli-
gion, that they might do their duties towards the church
and their families, alleged, that the Indians were by
nature slaves and incapable of being instructed ; and
many other falsehoods of which the Chronicler Herrera
makes mention against them. Those zealous ecclesias-
tics being unable, either by their authority or preach-
ing, to free those unhappy converts from the tyranny of
such misers, had recourse to the Catholic kings, and at

last obtained from their justice and clemency, those laws as favourable to the Americans as honourable to the court of Spain, that compose the Indian code, which were chiefly due to the indefatigable zeal of the bishop de la Casas. On another side, Garces, bishop of Tlascala, knowing that those Spaniards bore, notwithstanding their perversity, a great respect to the decisions of the vicar of Jesus Christ, made application in the year 1586, to pope Paul III. by that famous letter, of which we have made mention; representing to him the evils which the Indians suffered from the wicked Christians, and praying him to interpose his authority in their behalf. The pope, moved by such heavy remonstrances, despatched the next year the original bull, a faithful copy of which we have here subjoined (*t*), which was not made, as is manifest, to declare the Americans free men;

(*t*) Paulus papa III. universis Christi Fidelibus presentes Literas inspecturis Salutem & Apostolicam Benedictionem—"Veritas ipsa, quæ nec falli, nec fallere potest, cum Prædicatores Fidei ad officium prædicationis destinaret, dixit isse dignoscitur: *Euntes docete omnes gentes*: omnes dixit absque omni delectu, cum omnes Fidei disciplina capaces existant. Quod videns & invidens ipse humani generis æmulus, qui bonis operibus, ut pereant, semper adversatur, modum excogitavit hæcenus inauditum, quo impediret, ne Verbum Dei Gentibus, ut salvæ fierent, prædicaretur: ut quosdam suos satellites commovit, qui suam cupiditatem adimplere cupientes. Occidentales & Meridionales Indos, & alias Gentes, quæ temporibus istis ad nostram notitiam pervenerunt, sub prætextu quod Fidei Catholicæ expertes existant, uti bruta animalia, ad nostra obsequia redigendos esse, passim asserere præsumant, & eos in servitutum redigunt tantis afflictionibus illos urgentes, quantis vix bruta animalia illis servientia urgeant. Nos igitur, qui ejusdem Domini nostri vices, licet indigni, gerimus in terris, & Oves gregis sui nobis commissas, quæ extra ejus Ovile sunt, ad ipsum Ovile toto nixu exquirimus, attendentes Indos ipsos, utpote veros homines, non solum Christianæ Fidei capaces existere sed, ut nobis innotuit, ad Fidem ipsam promptissime currere, ac volentes super his congruis remediis providere, prædictos Indos & omnes alias gentes ad notitiam Christianorum in posterum deveniunt, licet extra fidem Christi existant, sua libertate & dominio hujusmodi uti, & potiri, & gaudere libere & licite posse, nec

men; for such a piece of weakness was very distant from that or any other pope: but solely to support the natural rights of the Americans against the attempts of their oppressors, and to condemn the injustice and inhumanity of those, who, under the pretence of supposing those people idolatrous, or incapable of being instructed, took from them their property and their liberty, and treated them as slaves and beasts. The Spaniards, indeed, would have been more pitiable than the rudest savages of the new world, if they had waited for a decision from Rome before they would acknowledge the Americans to be true men. It is well known, that long before the pope despatched that bull, the Catholic kings had earnestly recommended the instruction of the Americans, had given the most careful orders that they should be well treated, and that no wrong should be offered either to their property or their persons; and had sent several bishops to the new world, and some hundreds of missionaries at the royal expense, to teach those satyrs the faith of Jesus Christ, and train them in the Christian mode of life. In 1531, six years before that bull was out, the French missionaries alone had baptized in Mexico more than a million of those satyrs; and in 1534, the seminary of the Holy Cross was founded in Tlatelolco, for the instruction of a considerable number of those large apes, where they learned the Latin language, Rhetoric, Philosophy, and Medicine. If at first the Americans were esteemed satyrs;

“nec in servitutem redigi debere, ac quicquid secus fieri contigerit irritum & inane, ipsosque Indos, & alias Gentes Verbi Dei prædicatione, & exemplo bonæ vitæ ad dictam Fidem Christi invitandos fore. Auctoritate Apostolica per præsentem literas decernimus, & declaramus, non obstantibus præmissis, cæterisque contrariis quibuscunque.”—Datum Romæ anno 1537. IV. Non. Jun. Pontificatus nostri anno III. Questa, e non altra è quella famosa bolla, per la quale s'è fatto un sì grande schiamazzo.

tyrs, nobody can better prove it than Christopher Columbus their discoverer. Let us hear, therefore, how that celebrated admiral speaks, in his account to the Catholic king and queen, Ferdinand and Isabella, of the first satyrs he saw in the island of Haiti, or Hispaniola. "I swear," he says, "to your majesties, that there is not a better people in the world than these, more affectionate, affable, or mild. They love their neighbours as themselves; their language is the sweetest, the softest, and the most cheerful; for they always speak smiling; and although they go naked, let your majesties believe me, their customs are very becoming; and their king, who is served with great majesty, has such engaging manners, that it gives great pleasure to see him, and also to consider the great retentive faculty of that people, and their desire of knowledge, which incites them to ask the causes and the effects of things (*u*)."

As M. de Paw employed ten continued years to search into the affairs of America, he ought to have known, that in the countries of the new world subjected to the Spaniards, no other bishopricks are founded there than those which the Catholic king has constituted. To him belong, from the patronage given him over American churches by pope Julius II. in 1508, the foundation of bishopricks, and the presentation of bishops. To affirm, therefore, that Paul III. would acknowledge the Americans to be true men, in order to found bishopricks in the richest countries of the new world, is but the calumny of an enemy of the Roman church; for if he was not blinded by enmity, he would rather have perceived the zeal and humanity which the pope displays in that bull.

Dr.

(*u*) Cap. xxxii. of the History of Chr. Columbus, written by his son.

Dr. Robertson, who, in a great measure adopts the extravagant notions of M. de Paw, speaks thus of the Americans, in the VIIIth book of his History of America. “Some missionaries astonished equally at their slowness of comprehension, and at their insensibility, pronounced them a race of men so brutish, as to be incapable of understanding the first principles of religion.” But what missionaries these were, and how much their judgment is to be trusted, can be understood from no body better than Garces, in the above mentioned letter to pope Paul III. Let the passage which we have here subjoined be read (x), it will appear from it, that the reasons of such an error, were the ignorance and sloth of those missionaries; and we add, the false ideas they had imbibed from their infancy. Las Casas, Acosta, and other grave writers on America, say the same thing as Garces.

“A

(x) Quis tam impudenti animo ac perfricata fronte incapaces fidei afferere audeat, quos mechanicarum artium capacissimos intuemur, ac quos etiam ad ministerium nostrum redactos bonæ indolis, fideles, & solertes experimur? Et si quando, Beatissime Pater, Tua Sanctitas aliquem religiosum virum in hanc declinare sententiam audierit, etsi eximia integritate vitæ, vel dignitate fulgere videatur is, non ideo quicquam illi hac in re præstet auctoritatis, sed eundem parum aut nihil insudasse in illorum conversione certo certius arbitretur, ac in eorum addiscenda lingua, aut investigandis ingeniis parum studuisse perpendat: nam qui in his caritate christiana laborarunt, non frustra in eos jactare retia caritatis affirmant; illi vero qui solitudini dediti, aut ignavia præpediti neminem ad Christi cultum sua industria reducerunt, ne inculpari possint quod inutiles fuerint, quod propriæ negligentiae vitium est, id Infidelium imbecillitati adscribunt, veramque suam desidiam falsa incapacitatis impositione defendunt, ac non minorem culpam in excusatione committunt, quam erat illa, a qua liberari conantur. Lædit namque summe istud hominum genus talia afferentium hanc Indorum miserrimam turbam: nam aliquos religiosos viros retrahunt, ne ad eosdem in fide instruendos proficiscantur: quamobrem nonnulli Hispanorum qui ad illos debellandos accedunt, horum freti judicio illos negligere, perdere, ac mactare opinari solent non esse flagitium. *Ex literis Juliani Garcès Ep. Tlasc. ad Paulum III. Pont. Max.*

“ A council held at Lima,” continues Dr. Robertson, “ decreed, that on account of this incapacity they ought “ to be excluded from the sacrament of the Eucharist. “ And though Paul III. by his famous bull, issued in “ the year 1537, declared them to be rational creatures, “ entitled to all the privileges of Christians; yet, after “ the lapse of two centuries, during which they have “ been members of the church, so imperfect are their “ attainments in knowledge, that very few possess such a “ portion of spiritual discernment, as to be deemed worthy of being admitted to the holy communion “ Even after the most careful instruction, their faith is “ considered feeble and dubious, and though some of “ them have been taught the learned languages, and “ have gone through the ordinary course of academic “ education with applause, their frailty is so much suspected, that no Indian is ever ordained a priest, or received into any religious order.” In a few words, here are four errors at least. 1. That a council of Lima had excluded the Indians from the sacrament of the Eucharist, on account of their imbecility of mind. 2. That Paul III. declared the Indians rational creatures. 3. That very few Indians possess such a portion of spiritual discernment as to be judged worthy to approach to the sacred table. 4. That no Indian is ever ordained a priest.

With respect to the first, it is true, that in an assembly held at Lima, in the year 1552, which was called *Primum concilium Limæ*, though it was not a council, nor had ever any authority of a council, it was ordained that the Eucharist should not be administered to the Indians until they were perfectly instructed and persuaded in things of faith; because that sacrament is the food of
the

the perfect, but not because they were esteemed weak of understanding. This is clear from the first provincial council vulgarly called the second, held in Lima in the year 1567, which ordered priests to administer such sacrament to all the Indians who found themselves disposed for it (y). But notwithstanding that order to make those ecclesiastics comply, of which Acosta justly complained, the second council of Lima held in 1583, at which S. Toribio Mogrobejo presided, endeavoured to remedy those disorders by the decrees which we here subjoin (z), from which it is to be seen, that they for the same reasons

(y) *Quoniam omnes Christiani adulti utriusque sexus teneantur Sanctissimum Eucharistiæ Sacramentum accipere singulis annis saltem in Paschate, hujus tamen Provinciæ Antistites cum animadverterent gentem hanc Indorum & recentem esse & infantilem in fide, atque id illorum salutem expedire judicarent, statuerunt ut usque dum fidem perfecte tenerent, hoc divino sacramento, quod est perfectorum cibus, non communicarentur, excepto si quis ei percipiendi satis idoneus videretur . . . Placuit huic Sanctæ Synodo monere, prout serio monet, omnes Indorum Parochos, ut quos audita jam confessione perspexerint, huic cælestem cibum a reliquo corporali discernere, atque eundem devote cupere & poscere, quoniam sine causa neminem divino alimento privare possumus, quo tempore cæteris Christianis solent, Indis omnibus ministrarent. Conc. Lim. I. vulgo II, cap. 58.*

(z) *Cæleste viaticum, quod nulli ex hac vita migranti negat Mater Ecclesia, multis abhinc annis Indis atque Æthiopibus, cæterisque personis miserabilibus præberi debere Concilium Limense constituit. Sed tamen Sacerdotum plurium vel negligentia, vel zelo quodam præpostero atque intempestivo illis nihilo magis hodie præbatur. Quo fit, ut imbeciles animæ tanto bono tamque necessario priventur. Volens igitur Sancta Synodus ad executionem perducere, quæ Christo duce ad salutem Indorum ordinata sunt, severe præcipit omnibus Parochis, ut extreme laborantibus Indis atque Æthiopibus viaticum ministrare non prætermittant, dummodo in eis debitam dispositionem agnoscant, nempe fidem in Christum, & pœnitentiam in Deum suo modo . . . Porro Parochos qui a prima hujus decreti promulgatione negligentes fuerint, noverint se, præter divinæ ultionis judicium, etiam pœnas Arbitrio Ordinariorum, in quo conscientiæ onerantur, daturos: atque in Visitationibus in illos de hujus statuti observatione specialiter inquirendum. Conc. Lim. II. vulgo III. Act. 2. cap. 19.*

In Paschate saltem eucharistiam ministrare Parochus non prætermittat iis, quos & satis instructos, & correctione vitæ idoneos judicaverit: ne & ipse alioqui ecclesiastici præcepti violati reus sit. Ibid. cap. 20.

sons equally denied the eucharist to the Indians and to the Moors, who were slaves brought from Africa : that the true reasons for denying it were, in the judgment of the council, the negligence or sloth, and the indiscreet and misapplied zeal of those ecclesiastics, and that the council found itself obliged to put a remedy to so great a disorder by new decrees and severe punishments. We know well also, that those respectable decrees were not exactly executed, and it became necessary for the diocesan synod of Lima, Plata, Paz, Arequipa and Paraguay, to inculcate them afresh ; but that demonstrates the obstinacy of the ecclesiastics, not the want of capacity in the Americans.

With respect to the bull of Paul III. we have already shewn that it was not intended to declare the Americans men, but, on account of their right to all the privileges of men, to condemn their oppressors.

In regard to the third error of Dr. Robertson, which we have mentioned above, omitting at present what belongs to other countries of America as it is not necessary here ; it is certain and notorious, that in all New Spain the Indians are obliged as much as the Spaniards to receive the Eucharist at Easter, except those of remote countries, who are admitted or not to the sacred table, according to the judgment of the missionaries. In the three audiences into which New Spain is divided, there are, says Robertson, at least two millions of Indians (*a*). We are confident that this number is much inferior to the truth ; but be it so and no more. The Indians therefore, are not very few in number who possess so great a portion of spiritual discernment as to be judged

(*a*) History of America, Book viii.

judged worthy of approaching to the sacred table, unless two millions appear very few to him, or he thinks those bishops and priests rash, who not only admit but even oblige those Indians to communicate. But when we add to those the Indians of many provinces of South America who are equally obliged to receive the sacred Eucharist, the number will be greatly increased.

His fourth error, in which he affirms that no Indian is ever ordained priest is not less gross. It is subject of wonder, that a writer who collected so great a library of writers on America, and for whom so many accounts of the things of the New World were obtained from Madrid, should have been so ill informed on this as well as on other points. Dr. Robertson will please to know, therefore, that although the first provincial council held in Mexico in the year 1555 forbid that the Indians should be ordained, not on account of their incapacity, but because it was thought the lowness of their condition might draw some discredit on the ecclesiastical state, nevertheless the third provincial council, held in 1585, which was the most celebrated of all, and whose decisions are still in force, permitted them to be ordained priests, provided there was great care taken in admitting them into sacred orders. But it is necessary to observe, that the decrees of each council comprehend equally, and under the same conditions, both the Indians and Mulattoes that are there, who are born or descended of a European father and an African mother, or on the contrary; and nobody, we believe, doubts of the talents and capacity of the Mulattoes to learn all the sciences. Torquemada, who wrote his history in the first years of the last century, says, that they did not use to admit the Indians into religious orders, nor to ordain them priests, on account of their

violent inclination to drinking ; but he himself attests (b) that in his time Indian priests were extremely sober and exemplary : so that it is at least a hundred and seventy years ago since the Indians began to be made priests. From that unto the present time the American priests have been so numerous in New Spain, that they might be counted by hundreds : among those there have been many hundreds of rectors, several canons and doctors, and as report goes, even a very learned bishop. At present there are many priests, and not a few rectors, among whom have been three or four our own pupils. If in a point of this nature such gross errors have been committed by Dr. Robertson, what may we not apprehend from him in others which cannot so easily be cleared up and certified to an author, who writes at so great a distance from those countries without ever having seen them ?

We have had intimate commerce with the Americans, have lived for some years in a seminary destined for their instruction, saw the erection and progress of the royal college of Guadaloupe, founded in Mexico, by a Mexican Jesuit, for the education of Indian children, had afterwards some Indians amongst our pupils, had particular knowledge of many American rectors, many nobles, and numerous artists ; attentively observed their character, their genius, their disposition, and manner of thinking ; and have examined besides with the utmost diligence their ancient history, their religion, their government, their laws, and their customs. After such long experience and study of them, from which we imagine ourselves enabled to decide without danger of erring, we declare

(b) Torquemada, lib. xvii. cap. 13.

declare to M. de Paw, and to all Europe, that the mental qualities of the Americans are not the least inferior to those of the Europeans, that they are capable of all, even the most abstract, sciences, and that if equal care was taken of their education, if they were brought up from childhood in seminaries under good masters, were protected and stimulated by rewards, we should see rise among the Americans, philosophers, mathematicians, and divines who would rival the first in Europe. But it is a little difficult, not to say impossible, to make great progress in the sciences, in the midst of a life of misery, servitude, and oppression. Whoever contemplates the present state of Greece will not be apt to believe that those great men flourished there whom history records, were we not convinced of it by their immortal works, and the voice of all ages. But the obstacles which the people of Greece have to surmount before they can become learned are not comparable to those which the Americans always had, and still have to overcome. Nevertheless, we wish M. de Paw, and some other persons who think as he does, could be present without being observed in those assemblies or councils which are held by the Americans on certain days to deliberate on public affairs, that they might hear how those satyrs of the new world discourse and harangue.

Lastly, The whole ancient history of the Mexicans and Peruvians evinces to us, that they knew how to think and order their ideas, that they are susceptible of all the passions and impressions of humanity, and that the Europeans have had no other advantage over them than that of having been better instructed. The civil government of the ancient Americans, their laws, and their arts evidently demonstrate they suffered no want of genius. Their

Their wars shew us that their souls are not insensible to the excitements of love, as count de Buffon and M. de Paw think ; since they sometimes took up arms in his cause.

In regard to their courage, we have explained, when we spoke of their character, what we have observed in the present, and what we judge of the ancient Americans on this head. But as Mr. de Paw alleges the conquest of Mexico as a convincing proof of their cowardice, it may be proper to enlighten his ignorance, or rather to strengthen his little faith.

“ Cortes,” he says, “ conquered the empire of Mexico with four hundred and fifty vagabonds and fifteen horses, badly armed ; his miserable artillery consisted of six falconets, which would not at the present day be capable of exciting the fears of a fortress defended by invalids. During his absence the capital was held in awe by the half of his troops. What men ! what events !”

“ It is confirmed,” he adds, “ by the depositions of all historians that the Spaniards entered the first time into Mexico without making one single discharge of their artillery. If the title of hero is applicable to him who has the disgrace to occasion the death of a great number of rational animals, Ferdinand Cortes might pretend to it ; otherwise I do not see what true glory he has acquired by the overthrow of a tottering monarchy, which might have been destroyed in the same manner by any other assassin of our continent.” Those passages of the Philosophic Researches detect that M. de Paw was ignorant of the history of the conquest of Mexico, or that he suppresses what would openly contradict his system ; since all who have read that history know

know well, that the conquest of Mexico was not made with four hundred and fifty men, but with more than two hundred thousand. Cortes himself, to whom it was of more importance than to M. de Paw to make his bravery conspicuous, and his conquest appear glorious, confesses the excessive number of the allies who were under his command at the siege of the capital, and combated with more fury against the Mexicans than the Spaniards themselves. According to the account which Cortes gave to the emperor Charles V. the siege of Mexico began with eighty-seven horses, eight hundred and forty-eight Spanish infantry, armed with guns, cross-bows, swords, and lances, and upwards of seventy-five thousand allies of Tlascala, Huexotzinco, Cholula, and Chalco, equipped with various sorts of arms; with three large pieces of cannon of iron, fifteen small of copper, and thirteen brigantines. In the course of the siege were assembled the numerous nations of the Otomies, the Cohuixcas, and Matlatzincas, and the troops of the populous cities of the lakes; so that the army of the besiegers not only exceeded two hundred thousand but amounted to four millions according to the letter from Cortes; and besides these, three thousand boats and canoes, came to their assistance. We therefore ask M. de Paw if it appears to him to have been cowardice to have sustained, for full seventy-five days, the siege of an open city, engaging daily with an army so large, and in part provided with arms so superior, and at the same time having to withstand the ravages of famine? Can they merit the charge of cowardice, who, after having lost seven of the eight parts of their city, and about fifty thousand citizens, part cut off by the sword, part by famine and sickness, continued to defend themselves

themselves until they were furiously assaulted in the last hold which was left them (*p*).

“It is certain,” says M. de Paw, “by the depositions of all historians, that the Spaniards entered the first time into Mexico without making a single discharge of their artillery.” If this argument is peculiar to the logic of M. de Paw; if the Mexicans were cowards because the Spaniards entered into Mexico without a single discharge of their artillery, it might as well be said that the Prussians are cowards because the ambassadors of several courts of Europe enter into Berlin without discharging even a fusil. Who does not know that the Spaniards were admitted into that city as the ambassadors of the monarch of the East? Historians all recount this as well as Cortes himself, who feigned himself the ambassador of the Catholic king. If the Mexicans had been willing to oppose him then as they did the second time, how would the Spaniards have been able to enter with only six thousand men, when their second entry was so difficult with two hundred thousand (*q*)?

With respect to what M. de Paw adds against Cortes, we do not mean to make the apology of this conqueror, neither can we endure the panegyric which Solis has written in place of a history; but as an impartial person, well informed of all his military actions, we must confess, that in courage, constancy, and military prudence, he rivals
the

(*p*) All that we have here said respecting the siege and conquest of Mexico is taken from the letter of the conqueror Cortes to Charles V.

(*q*) “It is not less certain,” says Acosta, “that it was the aid of the Tlascalans which obtained to Cortes his victories, and the conquest of Mexico; and without them it would have been impossible to have made himself master of that place, or to have continued longer there. Those who make little of the Indians, and think the Spaniards could have conquered any country or nation by the superiority of their arms, valour, and horses, are grossly deceived.”

the most famous generals ; and that he possessed that species of heroism which we acknowledge in Alexander and the Cæsars, in whom we praise their magnanimity in spite of the vices with which it was blended.

The cause of the rapidity with which the Spaniards conquered America has been partly mentioned by M. de Paw : “ I confess,” he says, “ that the artillery was a “ destructive and all-powerful engine, which necessarily “ subdued the Mexicans.” If to the artillery we add the other superior arms, horses, and discipline on the part of the conquerors, and the divisions which prevailed among the conquered, it will be seen that there is no reason to charge the Americans with pusillanimity, or to wonder at the violent convulsion of the new world. Let M. de Paw imagine, that at the time of the noisy and cruel factions of Sylla and Marius the Athenians had invented artillery and other fire arms, and equipped only six thousand men with them, joining themselves not to the army of Marius, but only to some part of his troops, and undertaken the conquest of Italy ; does not M. de Paw think that they would have succeeded in spite of all the power of Sylla, the courage and discipline of the Roman troops, their numerous legions and cavalry, the multitude of their armies, their machines and the fortifications of their city ? What terror would the horrid sound of the artillery, and the destructive violence of the balls, not have struck to the minds of the boldest centurions, when they saw whole ranks of men carried off by them ? What then must the effect have been on those nations of the new world who had no arms nor cavalry, no discipline, machines, or fortifications like the Romans ? That, on the contrary, which is truly to be wondered at, is, that the brave Spaniards, with all their discipline, artillery,

lery, and arms, have not been able, in two centuries, to subdue the *Araucan* warriors of South America, though armed only with clubs and lances, nor the *Apaches* in North America, armed with bows and arrows; and above all, what appears incredible, but is notwithstanding certain, five hundred men of the nation of the *Seris*, have for many years been the scourge of the Spaniards of Sonora and Cinaloa.

Lastly, omitting many other absurd opinions of M. de Paw against the Americans, we shall only now take notice of the injury which he does them of the grossest kind in regard to their customs. There are four principal vices with which he charges the Americans, gluttony, drunkenness, ingratitude, and pederasty.

We never heard of the Americans being reproached with gluttony until we met with that passage in Mr. Condamine, cited and adopted by M. de Paw. We have found no author, who was the least instructed in the affairs of America, who did not praise the temperance of the Americans in eating. Whoever pleases may on this point consult Las Casas, Garces, the anonymous conqueror, Oviedo, Gomara, Acosta, Herrera, Torquemada, Betancourt, &c. All historians mention the wonder of the Spaniards at the temperance of the Indians; and, on the contrary, the wonder of the Indians to see the Spaniards eat more in one day than they did in a week. In short, the sobriety of the Americans is so notorious, that to defend them on this subject would be superfluous. Mr. Condamine perhaps saw in his travels on the river Maragnon, some famished Indians eat very greedily, and from them was persuaded, as happens often to travellers, that all the Americans were gluttons. It is certain that Ulloa, who was in America with Mr. Condamine,

Condamine, remained there a longer time, and got more knowledge of the customs of the Indians, speaks of them in a manner quite contrary to that French mathematician.

Drunkenness is the prevailing vice of those nations. We confess it sincerely in the first book of this history, explain its effects, and point out the cause of it; but we add also, that it did not prevail in the country of Anahuac before the Spaniards came there, on account of the great severity with which that vice was punished, though in the greater part of the countries of the old continent it is still uncorrected, and serves as an excuse for more heinous crimes. It is certain, from the inquiries made by authors into the civil government of the Mexicans, that there were several laws against drunkenness in Mexico as well as Tezcucó, in Tlascala, and other states, which we have seen represented in their ancient paintings. The sixty-third painting of the collection made by Mendoza represents two youths of both sexes condemned to death for having intoxicated themselves, and at the same time an old man of seventy, whom the laws permit, on account of his age, to drink as much as he pleases. There are few states in the world whose sovereigns have shewn greater zeal to prevent excesses of this kind.

In the above mentioned book also we have reported the common error respecting the gratitude of the Indians: but as what was said there will not be sufficient to convince those who are prepossessed against them, we shall here relate an instance of gratitude which will of itself be enough to dissipate this prejudice. In the year 1556 died, in Uruapa, a considerable place of the kingdom of Michuacan, on a visit to his diocese at the age of

ninety-five, Vasco de Quiroga, founder and first bishop of that church, who, after the example of St. Ambrose, was translated from the secular jurisdiction to the episcopal dignity. This celebrated prelate, worthy of comparison with the first fathers of Christianity, laboured indefatigably in favour of the people of Michuacan, instructing them as an apostle, and loving them as a father; he erected temples, founded hospitals, and assigned to each settlement of the Indians a branch of commerce, that the mutual dependance upon each other might keep them in stronger bonds of union, perfect the arts, and provide a manner of life for every one. The memory of such benefits is, after more than two ages, preserved as fresh in the minds of the Americans, as if their benefactor was yet living. The first care of the Indian women, as soon as their children begin to have any judgment, is to give them an account of their *Tata Don Vasco*: for so they still call him on account of the pious respect they bear to his memory. They communicate a knowledge of him by means of pictures of him, explaining all that he did in favour of their nation, and never pass before his image without kneeling. This prelate also founded, in 1540, a seminary in the city of Pazcuaro for the instruction of youth; and enjoined the Indians of *Santa Fe*, a place settled by him on the bank of the lake *Pazcuaro*, to send every week a man to serve in the seminary. He was obeyed, and for two hundred and thirty years past an Indian has never been wanted to attend upon the seminary without any necessity to force or even call them, from their zeal to make a return by such service for the benefits which that worthy prelate conferred on them. They preserve his bones with such veneration in the city of Pazcuaro, that once as the chapter

ter of the cathedral of Valladolid attempted to transport them there, the Indians became uneasy, and prepared to oppose it by force of arms, which they would have certainly done had not the chapter, in order to prevent any such disorder, abandoned their resolution. Can there be imagined a more conclusive proof of the gratitude of a nation? Similar demonstrations of the same disposition have been given by the Indians in many places of the kingdom, where they wished to retain the missionaries who had instructed them in their faith. Those instances, which happened in the two last centuries, may be learned from the third volume of Torquemada, and the Mexican Theatre of Betancourt. Of those which have occurred in our own times there are many living witnesses; and we can testify some ourselves. If the Americans ever shew themselves ungrateful to their patrons, it is because the continual experience of evils from them renders even their benefits suspicious: but whenever they are convinced of the sincere benevolence of their benefactors, they are capable of making a sacrifice of all their possessions to gratitude. All who have seen and observed with impartiality the manners of the Americans confirm this character.

But of all the remarks made by M. de Paw against the Americans, nothing has been more injurious than his affirmation that pederasty was much a vice in the islands, in Peru, in Mexico, and in all the new continent. We cannot conceive how M. de Paw, after having vented so horrid a calumny, had confidence to say in his reply to Don Pernety, that all his work of *Philosophical Researches* breathes humanity. Can it be humanity unjustly to defame all the nations of the new world with a vice so opprobrious to nature? Is it humanity to be enraged
against

against the Inca Garcilasso because he defends the Peruvians from such a charge? Although those were respected authors who ascribed this crime to all the people of America, there being many respected authors who say the contrary, M. de Paw, according to the laws of humanity, ought to have abstained from so gross an accusation. But how much more ought he to have avoided it when there is not any writer of authority on whose testimony he can support so universal an assertion. He may find some authors, as the anonymous conqueror, Gomara, and Herrera, who have accused some Americans of such a vice, or at most some people of America; but he will find no historian of credit who has dared to say that pederasty was much a vice in the *islands*, in *Peru*, in *Mexico*, and in all the new continent. On the contrary, all the historians of Mexico say unanimously, that such a vice was held in abomination by those nations, and make mention of the severe punishments prescribed by the laws against it, as appears from the works of Gomara, Herrera, Torquemada, Betancourt, and others. Las Casas, in his memorial to Charles V. presented in 1542, attests, that having made a diligent enquiry in the Spanish islands, Cuba, Jamaica, and Porto Rico, he found there was no memory of such a vice among those nations. The same thing he affirms of Peru, Yucatan, and all the countries of America in general; in some one place or other, he says, there may be some addicted to that crime; but he adds, the whole new world, however, must not be taxed with that vice. Who then has authorized M. de Paw to defame, in a point so injurious, the whole of the new world? Although the Americans were, as he believes, men without honour, and without shame, the laws of humanity forbid him to calumniate

lumniate them. Such is the excess into which his ridiculous eagerness to depreciate America leads him, and such are the consequences of his unnatural logic, that he constantly deduces from particular premises universal conclusions! If possibly the Panuchese, or any other people of America, were infected with that vice, is it from thence to be affirmed that pederasty was much a vice in all the new world? The Americans might as well defame in the same manner the whole old continent, because among some ancient people of Asia and among the Greeks and Romans it was a notorious vice. Besides, it is not known that there is any nation at present in America infected with that vice; whereas we are informed by several authors, that some people of Asia are still tainted with it; and that even in Europe, if what Mr. Locke and M. de Paw say is true, among Turks of a certain profession, another vice more execrable, of the same kind, is common; and that instead of being severely punished for it, they are held, by that nation, in the light of saints, and receive the highest marks of respect and veneration.

Amongst the crimes charged to the Americans by M. de Paw suicide is included. It is true that at the times of the conquest many hanged themselves, or threw themselves down precipices, or put an end to themselves by abstinence; but it is not the least wonderful that men who had become desperate from continual harassment and vexations, who thought their gods had abandoned, and the elements conspired against them, should do that which was frequent with the Romans, the Franks, and ancient Spaniards, the modern English (x), French, and Japanese,

(x) We have been informed by a person who was at the same time in London, that a suicide left in writing, that he killed himself to get free of the trouble of dressing and undressing himself every day.

Japanese, for a slight motive ; for some false idea of honour, or some caprice of passion ? Who could persuade himself that a European would reproach the Americans with suicide in an age in which it is become a daily event in England and France (y), where the just ideas we have from nature and her religion, are banished from the mind, and arguments invented, and books published, to vindicate it ? So great is the rage for defaming America and the Americans.

A similar passion seems to have affected that Spaniard who formed the general Index of the Decads of Herrera, inconsiderately imputing to all the Americans what Herrera says in his work of some individuals, with various exceptions. We copy here what we have read in that Index. “ The Indians,” he says, “ are very “ slothful, very full of vices, great drunkards, by nature lazy, weak, liars, cheats, fickle, inconstant, have “ much levity, cowardly, nasty, mutinous, thievish, ungrateful, inexorable, more vindictive than any other “ nation, of so low a nature, &c. that it is doubtful if “ they are rational creatures ; barbarous, bestial, and “ led like the brutes by their appetites.” This is the language of M. de Paw, and other most humane Europeans ; so it appears they do not think themselves obliged to believe the truth with regard to the people of the new world, nor observe the laws of fraternal charity, published by the son of their own God in the old world.

But it would be easy for any American of moderate genius, and some erudition, who was desirous of retaliating upon those authors, to compose a work with this title,

(y) We know in one of these last years, there have been one hundred and fifty suicides committed in the city of Paris alone.

tle, Philosophical Enquiries concerning the Inhabitants of the Old Continent. In imitation of the method pursued by M. de Paw, he would collect whatever had been written of the barren countries of the old world, of inaccessible mountains, of marshy plains, of impenetrable woods, of sandy deserts, and malignant climes; of disgusting and noxious reptiles and insects, of serpents, of toads, of scorpions, of ants, of frogs, of scolopendras, of beetles, of bugs and lice; of quadrupeds, irregular, small, without tails, imperfect and pusillanimous; of people, degenerated, ill-coloured, irregular in stature, deformed in shape, of bad constitutions, dastardly minds, dull genius, and cruel dispositions. When he came to the article of vices, what abundance of materials would be ready for his work! What examples of baseness, perfidy, cruelty, superstition, and debauchery; what excesses in every kind of vice. The history of the Romans alone, the most celebrated nation of the ancient world, would furnish him with an incredible quantity of the most horrid depravities. He would be sensible, that such defects and vices were not common to all the countries, nor all the inhabitants of the ancient continent; but that would not signify, as he must follow his model in M. de Paw, and make application of his logic. This work would, unquestionably, be more valuable, and more worthy of faith than that of M. de Paw; for as this Philosopher does not cite against America and the Americans any but European authors, that American writer, on the contrary, would, in his curious work, refer to, and quote only the authors of the same continent against which he wrote.

DISSERTATION VI.

Of the Culture of the Mexicans.

MR. de Paw, perpetually incensed against the new world, terms all the Americans barbarians and savages, and esteems them inferior in industry and sagacity to the coarsest and rudest nations of the old continent. If he had confined himself to say, that the American nations were in great part uncultivated, barbarous, and beastly in their customs, as many of the most cultivated nations of Europe were formerly, and as several people of Asia, Africa, and even Europe are at present; that the most civilized nations of America were greatly less polished than the greater part of the European nations; that their arts were not nearly perfected, nor their laws so good, or so well framed; and that their sacrifices were inhuman, and some of their customs extravagant, we would not have reason to contradict him. But not to distinguish between the Mexicans and Peruvians, and the Caribs and Iroquese, to allow them no merit or virtues, to undervalue their arts, and to depreciate their laws, and place those industrious nations below the coarsest nations of the old continent, is obstinate persistence in an endeavour to revile the new world and its inhabitants, instead of pursuing, according to the title of his book, the investigation of truth.

We call those men barbarous and savage, who, led more by caprice and natural will than guided by reason, neither live in society, nor have laws for their government, judges to determine their differences, superiors to watch over their conduct, nor exercise the arts which
are

are necessary to supply the wants, and remedy the miseries of life ; those, in short, who have no idea of the Divinity, or, at least, have not established any worship by which they acknowledge him. The Mexicans, and all the other nations of Anahuac, as well as the Peruvians, confessed a supreme omnipotent Being, although their belief was like that of other idolatrous people, mixed with errors and superstition. They had priests, temples, sacrifices, and established rites, for the uniform worship of the Divinity. They had a king, governors, and magistrates ; they had numerous cities, and a most extensive population, as we shall make appear hereafter. They had laws and customs, the observance of which was attended to by their magistrates and governors. They had commerce, and took infinite care to enforce justice and equity in contracts. Their lands were distributed, and every individual was secured in the property and possession of his soil. They exercised agriculture and other arts ; not only those necessary to life, but also those which contributed to luxury and pleasure alone. What more is necessary to defend nations from the imputation of being barbarous and savage ? Money, says M. de Paw, the use of iron, the art of writing, and those of building ships, constructing bridges of stone, and making lime. Their arts were imperfect and rude ; their language extremely scarce of numeral terms and words fit to express universal ideas, and their laws must be reckoned none ; for laws cannot be where anarchy and despotism reign.

S E C T. I.

Of the want of Money.

MR. de Paw decides that no nation of America was cultivated or civilized, because no one made use of money ; and to support this assertion he quotes a passage from Montesquieu : “ Aristippus,” says this politician (a), “ having been shipwrecked, made by swimming to “ the neighbouring shore ; he saw upon the sand some “ figures of Geometry drawn, and became full of joy, “ being persuaded that he was thrown among a Greek “ people, and not any barbarous nation. Imagine to “ yourself that by some accident you are placed in an un- “ known country ; if you find any money there, do not “ doubt that you are arrived among a polished people.” But if Montesquieu justly infers the civilization of a country from the use of money, M. de Paw does not well deduce the want of civilization from the deficiency of money. If we are to understand by money, a piece of metal, with the stamp of the prince, or the public, it is certain that the want of it in a nation is no token of barbarity. “ The Athenians,” says the same author, Montesquieu, “ because they had no use of the metals, “ employed oxen for money, as the Romans did sheep ;” and from thence took its origin, as we all know, the word *pecunia* ; as the Romans put the stamp of a sheep on the first money they coined, which they employed afterwards in their contracts. The Greeks were certainly a very cultivated nation in the times of Homer, since it was impossible that in the midst of an uncultivated nation, a man should spring up capable of composing

(a) *Esprit des Loix*. liv. xviii. chap. 13.

sing the Iliad and the Odyfsey, those two immortal poems, which, after twenty-seven centuries, are still admired, but have never been equalled. The Greeks, however, at this period, did not know the use of coined money, as appears from the works of that renowned poet, who, whenever he means to signify the value of any thing, expresses it no otherwise than by the number of oxen or sheep which it was worth; as in the VIIth book of the Iliad, when he says, that Glaucus gave his arms of gold, which were worth an hundred oxen, for those of Diomedé, which were of copper, and not worth more than nine. Whenever he speaks of any purchase by contract, he mentions it no otherwise than by barter, or exchange. And therefore in that ancient controversy between the Sabinians and Proculians, two sects of lawyers, the first insisted that a real purchase and sale could be made without a price, supporting this position by certain passages of Homer, where those are said to buy and sell who only exchange. The Lacedemonians were a civilized nation of Greece, although they did not use money; and among the fundamental laws published by Lycurgus, was that law of not carrying on commerce otherwise than by means of exchange (*b*). The Romans had no coined money until the time of Servius Tullius; nor the Persians until the time of Darius Hyftaspes; and yet the nations which preceded those epochs were not called barbarous. The Hebrews were civilized at least from the time of their judges, but we do not find that stamped money was in use among them until the time of the Maccabees. The want of coined money, therefore, is no argument of barbarity.

If

(*b*) *Emi singula non pecunia sed compensatione mercium jussit. Justin. lib. iii.*

If by money is understood a sign representing the value of all merchandize, as Montesquieu defines it (c), it is certain, that the Mexicans, and all the other nations of Anahuac, except the barbarous Chechemecas and Otomies, employed money in their commerce. What was the cacao, of which they made constant use in the market to purchase whatever they wanted, but a sign representing the value of all merchandize. The cacao, had its fixed value, and was reckoned by numbers; but to save the trouble of counting it, when the merchandize was of great value and worth, many thousands of the nuts, they knew that every bag of a certain size contained three Xiquipilli, or twenty-four thousand nuts. Who will not acknowledge, that the cacao is much fitter to be made use of as money than oxen or sheep, which the Greeks and Romans made use of, or the salt which is at present employed by the Abyssinians? The oxen and sheep could not be employed to purchase any thing of small value, and any sickness, or other misfortune, which might befall those animals, would impoverish those who had no other capital. "Metal has been adopted for money," says Montesquieu, "that the sign may be more durable. The salt which the Abyssinians use has this defect that it is continually diminishing." Cacao, on the contrary, could pass for any merchandize, was transportable, and guarded more easily, and preserved with less danger and with less care.

The use of cacao in the commerce of those nations, will appear, perhaps, to some persons, a mere exchange; but it was not so: for there were several species of cacao, and the *Tlalcacahuatl*, small cacao, which they used in their diet and beverages, was not used as money: they employed other species, of inferior quality and less useful

useful for food, which were in constant circulation as money (*d*), and used in no other way almost than in commerce. Of this sort of money, all historians of Mexico, Spanish, as well as Indian, make mention. Of the other four species, which we spoke of in our VIIth book of this history, Cortes and Torquemada both give an account. Cortes, in his last letter to the emperor Charles V. affirms, that having made enquiries concerning the commerce of those nations, he found that in Tlachco, and other provinces, they trafficked with money. If he had not meant to be understood to speak of coined money, he would not have restricted the use of it to Tlachco, and some other provinces; because, he knew very well, without making such enquiries, that at the markets of Mexico, where he had been frequently present, they employed, instead of money, the cacao, and certain little cloths of cotton, called by them *Patolquachtli*, and gold in dust enclosed in goose quills. It is therefore somewhat suspicious, notwithstanding that we have said in our former book, that there was also coined money among them, and that both those thin pieces of tin which Cortes mentions, and those pieces of copper, in form of T, mentioned by Torquemada, as two species of money, had some stamp upon them authorised by the sovereign, or his feudatory lords.

To hinder any frauds in commerce, nothing but common articles of food could be sold out of the marketplace, which was kept, as we have already said, in the greatest order that can be imagined. There were measures fixed by the magistrates; the commissaries we mentioned

(*d*) In the capital itself of Mexico, where from eighteen to twenty thousand crowns (pesos fuertes) are annually coined in gold and silver, the poor people still make use of the cacao to purchase small articles in the market.

tioned formerly, were continually observing all that happened ; and the judges of commerce were charged to take cognizance of all disputes between the merchants, and punish every trespass which was committed ; and notwithstanding it must be said, that the Mexicans were inferior in industry to the rudest people of the old continent ; among whom are some, that after so many centuries, and the example of other nations of their own continent, do not yet know the advantages of money.

S E C T. II.

On the Use of Iron.

The use of iron is one of those things which M. de Paw requires to call a nation cultivated ; and from the want of it he believes all the Americans barbarians. So that if God had not created this metal, all men must, according to the sentiments of this philosopher, have of necessity remained barbarous. But in the same place of his work where he reproaches the Americans with barbarity, he furnishes us all the arguments we could desire to refute it. He affirms, that in all the extent of America there are found but few mines of iron, and those so inferior in quality to those of the old continent, that it cannot even be made use of for nails. He tells us, that the Americans were in possession of the secret, now lost in the old continent, of giving copper a temper equal to that of steel : that Godin sent, in 1727 (probably 1747, as in 1727, he was not gone to Peru), to the count de Maurepas, an old ax of hard Peruvian copper ; and that count Caylus having observed it, he discovered that it equalled the ancient arms of copper in hardness, of which
the

the Greeks and Romans made use, who did not employ iron in many of those works in which we employ it at present; either because then it was more scarce, or because their tempered copper was better in quality than our steel. Lastly, he adds, that the count de Caylus, being surpris'd at that art, became persuad'd that (though in this he is oppos'd by Mr. de Paw), it was not the work of the beastly Peruvians, whom the Spaniards found there in the times of the conquest, but of some other more ancient and more industrious nation.

From all this, observ'd by M. de Paw, we draw these four important conclusions: 1. That the Americans had the honour of imitating the two most celebrated nations of the old continent in the use of copper. 2. That their conduct was wise in not making use of an iron so bad, that it was not even fit for making nails, but by making use of a sort of copper to which they gave the temper of steel. 3. That if they did not know the very common art of working iron, they were in possession of that more singular skill of tempering copper like steel, which the European artists of this enlightened century have not been able to restore. 4. That the count de Caylus was as much deceiv'd in the judgment which he form'd of the Peruvians, as M. de Paw has been in his respecting all the Americans. These are the lawful inferences to be drawn from the doctrine of this philosopher, on the use of iron, and not that of want of industry which he pretends to deduce. We should be glad to know from him, if there is more industry required to work iron as the Europeans do, than to work without iron every sort of stone and wood, to form several kinds of arms, and to make without iron, as the Americans used to do, the most curious works of gold, of silver, and
of

of gems. The particular use of iron does not prove great industry in the Europeans. Invented by the first men, it passed easily from one to another; and as the modern Americans received it from the Europeans, in the same manner the ancient Europeans had it from the Asiatics. The first peoplers of America certainly knew the use of iron, as the invention of it was cotemporary with the world; but it is probable, that that happened which we have conjectured in our first Dissertation, that is, not having found at first the mines of that metal in the northern countries of America where they had settled themselves, the memory of it was lost to their descendants.

But, finally, if those are barbarians who know not the use of iron, what must they be who know not the use of fire? In all the vast region of America, no nation has been found, nor tribe so rude, which did not know the art of kindling fire, and employing it for the common purposes of life; but in the old world people have been found so barbarous, that they neither used nor had any knowledge of fire. Such have been the inhabitants of the Marian Islands, to whom that element was totally unknown until the Spaniards arrived there, as the historians of those isles attest: yet M. de Paw would persuade us that the American people are more savage than all the savages of the old world.

In other respects, M. de Paw is as wrong in what he says of the iron of America as in what he thinks of the copper. In New Spain, Chili, and many other countries of America, numerous mines of good iron have been discovered, and if it was not prohibited to work them, in prejudice of the commerce of Spain, America could furnish Europe all the necessary iron in the same manner as she supplies it with gold and silver. If M. de Paw
had

had known how to make his enquiries concerning America, he would have learned from the chronicler Herrera, that even in the island of Hispaniola, there is a better iron there than in Biscay. He would have found also from the same author, that in Zacatula, a maritime province of Mexico, there are two sorts of copper; the one hard, which is used instead of iron, to make axes, hatchets, and other instruments of war and agriculture, and the other flexible and more common, which they use to make pots, basons, and other vessels, for domestic use; so that they had no occasion for the boasted secret of hardening copper. Our sincerity also compels us to defend in the same manner the true progress of American industry, and to reject those imaginary inventions which are attributed to the new world. The secret of which the Americans were really in possession of is that which we read in Oviedo, an eye witness, and a person skilled and intelligent in metals. "The Indians," he says, "know very well how to gild copper vessels, or those of low gold, and to give them so excellent and bright a colour, that they appear to be gold of twenty-two carats and more: this they do by means of certain herbs. The gilding is so well executed, that if a goldsmith of Spain or Italy possessed the secret he would esteem himself very rich."

S E C T. III.

On the Art of building Ships, and Bridges, and of making Lime.

IF other nations deserve the reproach of being ignorant how to build ships, it is certainly not due to the Mexicans; as not having rendered themselves masters of the

sea-coasts, until the last years of their monarchy they had no occasion nor convenience for contriving any such structures. The other nations, who occupied the shores of both seas before the Mexicans gained dominion over them, were satisfied with the boats which were in use among them, for fishing, and commerce with the neighbouring provinces; because, being free from ambition and avarice, which have been the first incentives to long navigations, they did not think of usurping the states lawfully possessed by other nations, nor desired to transport from distant countries those precious metals for which they had no demand. The Romans, although they had founded their metropolis near to the sea, remained five hundred years without constructing large vessels (*e*), until the ambition of enlarging their dominions, and making themselves masters of Sicily, prompted them to build ships to pass the strait which divided them from it. What wonder is it then if those nations of America, who felt no such impulses to abandon their native country, did not invent vessels to transport themselves to distant lands? It is certain, that the not having constructed ships does not argue any want of industry in them who had no interest in the invention.

Thus it is with regard to the invention of bridges. M. de Paw affirms, that there was not a single stone bridge in America at the time it was discovered, because the Americans did not know how to form arches; and that the secret of making lime was altogether unknown in America.

(*e*) Appius used every possible diligence to come to the aid of the Mamertines. In order to accomplish this he thought of passing the strait of Messina, but the enterprise was rash, even dangerous, and according to all prudent appearances impossible. The Romans had no naval armament, but mere barges, or vessels coarsely constructed, which might be compared with the canoes of the Indians. Rollin. Rom. Hist. lib. ii.

America. These three assertions are three very gross errors. The Mexicans did know how to make bridges of stone, and among the remains of their ancient architecture are to be seen at present the large and strong pilasters which supported the bridge which was upon the river Tula. The remains of the ancient palaces of Tezcucuo, and still more their *Temazcalli*, or vapour baths, shew us the ancient use of arches and vaults among the Mexicans, and the other nations of Anahuac. Diego Valades, who went to Mexico a few years after the conquest, and remained there thirty years, gives us, in his *Christian Rhetoric*, the image of a small temple which he saw, and therefore leaves no sort of doubt in this matter.

With respect to the use of lime, it requires the forwardness of M. de Paw to be able to affirm, as he does, that the secret of making lime was totally unknown in all America; since it is certain, from the testimony of the Spanish conquerors as well as the first missionaries, that the nations of Mexico not only made use of lime, but that they had the art of whitening and curiously smoothing and polishing the walls of their houses and temples. It appears from the histories of B. Diaz, Gomara, Herrera, Torquemada, and others, that the wall of the principal palace of Mexico appeared to the first Spaniards who entered the city to be made of silver, from their being so finely whitened, and shining with polish. It is certain, lastly, from the paintings of the Tributes which are in Mendoza's collection, that the cities of Tepejacac, Techamachalco, Quecholac, &c. were obliged to pay annually to the king of Mexico four thousand sacks of lime. But although we had none of these proofs, the remains of ancient edifices, still extant in
Tezcucuo,

Tezcuco, Mictlan, Guatusco, and many other places of that kingdom, would be sufficient to evince the truth of what we have asserted, and make M. de Paw blush at his rashness and indiscretion.

In regard to Peru, although Acoſta confeſſes that lime was not in uſe there, and that its natives neither conſtructed arches nor bridges of ſtone ; which circumſtances proved ſufficient for M. de Paw to ſay, that the uſe of lime was totally unknown in all America ; notwithſtanding Acoſta, who was no vulgar man, and neither exaggerated nor extenuated facts with reſpect to the Americans, gives much praiſe to the wonderful induſtry of the Peruvians for their bridges of *totor*a or reeds at the mouth of the lake of Titicaca, and in other places, where the immense depth, or the extraordinary rapidity of the rivers, did not permit them to make bridges of ſtone, or made the uſe of boats dangerous. He affirms to have paſſed ſuch kind of bridges and boats, and alſo the eaſineſs and ſecurity of the paſſage. M. de Paw takes upon him to ſay, that the Peruvians did not know the uſe of boats, that they did not make windows to their houſes, and even ſuſpects that their houſes had no roofs. Theſe are the abſurd ſpeculations in the cloſet of a writer on America : he makes it very clear, that he does not know any thing of the *bejucos* of the Peruvian bridges, and that he has formed no idea of the rivers of South America.

S E C T. IV.

On the Want of Letters.

NO nation in America knew the art of writing, if by it we are to understand the art of expressing on paper, on skins, on cloths, or on some other similar substance, any sort of words by the different combinations of certain characters : but if the art of writing is taken for that of representing and explaining any subject to absent persons, or posterity, by means of figures, hieroglyphics, and characters, it is certain that such an art was known and much used by the Mexicans, the Acolhuas, the Tlascalans, and all the other polished nations of Anahuac. The count de Buffon, in order to demonstrate that America was a country entirely new, and the people who inhabited it also new, has alleged, as we have already said elsewhere, that even the nations who lived in societies were ignorant of the art of transmitting their events to posterity by means of durable signs, although they had found the art of communicating together at a distance, and of writing by making knots on cords. But this same art which they made use of to treat with those who were absent could not serve also to speak to posterity. What were the historical paintings of the Mexicans but durable signs to transmit to posterity the memory of events to distant places and distant ages? The count de Buffon shews himself truly as ignorant of the history of Mexico as he is acquainted with the history of nature. M. de Paw, although he grants that art to the Mexicans which the count de Buffon unjustly denies them, makes, however, several remarks to depreciate it ; and among others some so singular we must mention them.

He

He says that the Mexicans did not use hieroglyphics ; that their paintings were nothing but the coarse drafts of objects ; that, in order to represent a tree they painted a tree ; that their paintings no where shew any understanding of light and shade, any idea of perspective, or imitation of nature ; that they had made no progress in that art, by means of which they attempted to perpetuate the memory of events and things passed ; that the only copy of historical paintings saved from the burning which the first missionaries made of them, is that which the first viceroy of Mexico sent to Charles V. which was afterwards published by Thevenot in France, and Purchas in England ; that this painting is so coarse and ill executed, that it is not to be discerned whether it treats, as the interpreter says, of eight kings of Mexico, or eight concubines of Montezuma, &c.

M. de Paw shews his ignorance throughout here, and from thence proceeds his forwardness in writing. Shall we give more faith to a Prussian philosopher, who has seen only the gross copies by Purchas, than to those who have seen and carefully studied many original paintings of the Mexicans ? M. de Paw will not allow the Mexicans to have made use of hieroglyphics, because he would not have it thought that he grants them any resemblance to the ancient Egyptians. Kircher, that celebrated enquirer into, and praiser of Egyptian antiquities, in his work entitled *Oedipus Egyptiacus*, and Adrian Walton in his preface to the Polyglott Bible, are of the same opinion with M. de Paw ; but their opinion has no other support than the same copy by Purchas : but Motolinia, Sahagun, Valades, Torquemada, Arrigo, Martinez, Siguenza, and Boturini, who knew the Mexican language, conversed with the Indians, saw and diligently studied many ancient paintings,

paintings, say, that among the different modes practised by the Mexicans to represent objects, that of hieroglyphics was one, and that of symbolical pictures another. The same point is attested by Acoſta and Gomara, in their histories ; by Eguiara, in the learned preface to the *Mexicana Bibliotheca* ; and by thoſe learned Spaniards who published, with new additions, the work of Garcia *on the Origin of the Indians*. Kircher was ſtrongly refuted by Siguenza in his work entitled *Theatre of Political Virtues*. It is certain that Kircher contradicts himſelf openly ; for in the firſt volume of the *Oedipus Egyptiacus*, where he compares the religion of the Mexicans with that of the Egyptians, he freely confeſſes that the parts of which the image of the god Huitzilopochtli was compoſed, had many ſecret and myſterious ſignifications. Acoſta, whoſe hiſtory is juſtly eſteemed by M. de Paw, in the deſcription which he gives of that image, ſays, “ all this ornament which we have mentioned, and the “ reſt, which was conſiderable likewiſe, had its particular ſignifications, according to what the Mexicans declared :” and in the deſcription of the idol of Tezcatlipoca expreſſes himſelf in theſe terms : “ His hair was “ tied with a golden cord, from the extremity of which “ hung an ear-ring of the ſame metal, with clouds of “ ſmoke painted upon it, which ſignified the prayers of “ the afflicted and ſinners, who were liſtened to by that “ god when they recommended themſelves to him. In “ his left hand he had a fan of gold, adorned with beautiful green, blue, and yellow feathers, ſo bright that “ it ſeemed a mirrour ; by which they intimated, that “ in that mirrour he ſaw every thing which happened in “ the world. In his right hand he had four arrows to “ ſignify the puniſhment he gave to criminals for their “ miſdeeds.”

“ misdeeds.” What are all those, and other insignia of the Mexican idols, of which we have made mention in the sixth book of this history, but symbols and hieroglyphics, very similar to those of the Egyptians ?

M. de Paw says, that the Mexicans did nothing else to represent a tree but paint a tree : but what did they to represent day and night, the month, the year, the century, the names of persons ? How could they represent time and other things which have no figure, without making use of symbols or characters ? “ The Mexicans,” says Acoſta, “ had their figures and hieroglyphics, by “ which they represented things in this manner ; that is, “ those things which had a figure were represented by “ their proper figures ; and for those which had no proper image they made use of other characters to signify “ them ; thus they represented whatever they would ; “ and to mention the time in which any event happened, they employed painted wheels, each of which comprehended a century of fifty-two years, &c. (f).”

But here we have another piece of insult from the ignorance of M. de Paw. He ridicules the secular wheels of the Mexicans, the explanation of which he says Carrieri ventured to give, in imitation of a Castilian professor called *Congara*, who did not dare to publish the work which he had promised on this subject ; because his relations and friends assured him that it contained many errors. It would appear that M. de Paw cannot write without committing errors. That professor whom Carrieri or Gemelli imitates, was not a Castilian but a Creole, born in the city of Mexico ; nor was he called Congara, but Siguenza and *Gongora* : he did not print his
Mexican

(f) Stor. Nat. e Mor. lib. vi. cap. 7.

Mexican ciclography, which was the work Gemelli made use of, not because he feared any censure from the public, but because of the excessive expenses of printing in those countries ; which have also prevented the publication of many other excellent works, not only of Siguenza, but other most learned authors. To say that the relations and friends of Siguenza dissuaded him from the publication of that work because they found many errors in it, is not a mere mistake occasioned by inattention, but appears a fiction devised to abuse and mislead the public. Who has communicated to M. de Paw so strange an anecdote which is altogether unknown to New Spain, where the memory and fame of that great man is so celebrated, and where the learned lament the loss of that and many other works of the same author ? What could Siguenza fear from the publication of the Mexican wheels, published already by Valades in Italy a century before him, and described by Motolinia, Sahagun, Gomara, Acosta, Herrera, Torquemada, and Martinez, all Europeans, and by the Mexican, Acolhuan, and Tlascalan, historians, Iztlilxochitl, Chimalpain, Tezozomoc, Niza, Ayala, and others ? All those authors are agreed with Siguenza in that which respects the Mexican wheels of the century, the year, the month, and only differ respecting the beginning of the year, and the name of some months, for the reasons which we have mentioned in the sixth book of this history. Besides, all authors who have written on this subject, both Spanish and American, who are many in number, agree in saying that the Mexicans and other nations of those countries made use of such wheels to represent their century, their year, and their month ; that their century consisted of fifty-two years, their year of three hundred and sixty-five days, divided into eighteen

months of twenty days each, and five days which they called *nemontemi*; that in their century they counted four periods of thirteen years, and that the days also were counted by periods of thirteen; that the names and characters of the years were only four, that is those of the *rabbit*, the *cane* or *reed*, the *flint*, and the *house*, which without interruption were alternately used with different numbers.

This cannot be, says M. de Paw, because it would suppose them to have made a long series of astronomical observations, and thereby attained a knowledge sufficient to enable them to regulate the solar year, and these could not happen to be united with that profound ignorance in which those people were immersed. How could they perfect their chronology while they had no terms to count a higher number than three? Therefore, if the Mexicans had really that method of regulating time, they ought not to be called barbarians and savages, but rather a cultivated and polished people; because a nation must be most cultivated which has made a long series of accurate observations and acquired exact knowledge in astronomy. But the certainty of the regulation of time among the Mexicans is such as not to admit of the smallest doubt: because, if the unanimous testimony of the Spanish writers respecting the *communion* of the Mexicans is not to be doubted, which M. de Paw himself says is not (g), how can we doubt of the method which those nations had to compute years and centuries,

(g) " Je vous avoue que le consentement de tous les Historiens Espagnols ne permet gueres de douter que ces deux peuples Americains (*the Mexicans and Peruvians*) n'eussent dans la somme immense de leurs superstitions grossieres, de quelques usages qui ne differoient pas beaucoup de ce qu'on nomme la Communion parmi nous" Tom. II. Letter I.

ries, and its conformity to the solar course, both facts being attested unanimously by the Spanish, Mexican, Acolhuan, and Tlascalan historians? Besides the deposition of the Spaniards in this matter is of very great weight, as they were, as M. de Paw says, rather inclined to degrade the nations of America so far as even to doubt of their rationality. It is necessary, therefore, to believe what historians say of those wheels, and to confess that the Mexicans were not immersed in that profound ignorance which M. de Paw pretends. With regard to what he says of the scarcity of words to express numbers in the Mexican language, we shall, in another place, demonstrate his error as well as his ignorance.

It cannot be known, resumes M. de Paw, what was contained in the Mexican paintings; because the Spaniards themselves could not understand them, until they were explained by the Mexicans, and none of the latter have known hitherto enough to be able to translate a book! In order that the Spaniards should have understood the Mexican paintings, it was not necessary that the Mexicans should know the Spanish language, because it was sufficient that the Spaniards comprehended the Mexican; nor is there so much necessary to explain a picture as to translate a book. M. de Paw says, that on account of the roughness of the Mexican language, no Spaniard has ever learned to pronounce it, and that, from the incapacity of the Mexicans, none of them have yet learned the Spanish tongue: but both the one and the other assertion are far from being true. Of the Mexican language we shall treat in its place. The Castilian has always been very common among the Mexicans, and there are many amongst them who can speak it

it as well as the Spaniards. Many of them have written their ancient history in Castilian, and also that of the Conquest of Mexico; some of whom we have mentioned in the Catalogue prefixed to this history. Others have translated Latin books into Castilian, Castilian into Mexican, and Mexican into Castilian: amongst others deserving of mention, are D. F. Ixtlilxochitl, whom we have so often cited; D. A. Valerianes, of Azcapozalco, the master in the Mexican language to the historian Torquemada, &c. We know from the History of the Conquest, that the celebrated Indian donna Marina, learned with great quickness and facility the Castilian language, and that she spoke the Mexican, and also the Maya language well, which are more different from each other than the French, the Hebrew, and the Illyrian. There having been at all times, therefore, very many Spaniards who have learned the Mexican, as we shall shew, and very many Mexicans who have learned the Spanish; why might not the Mexicans have been able to instruct the Spaniards in the significations of their pictures?

With respect to the copies of the Mexican paintings, published by Purchas and Thevenot, it is true that the proportions, or laws of perspective, are not observed in them; but those gross coarse copies having been cut in wood, these authors have possibly increased the defects of the originals; nor ought we to wonder if they have omitted some things contributing to the perfection of those pictures: as we know that they omitted the copies of the twelfth and twenty-second paintings of that collection altogether, and the images of the cities in most of the others; and besides, they change the figures of the years corresponding to the reigns of Ahuitzotl and Montezuma

tezuma II. as we have already mentioned. Boturini, who saw in Mexico the original paintings of those annals, and of the register of the tributes which were contained in the copies published by Purchas and Thevenot, laments the great defects of those editions. It is sufficient to compare the copies published in Mexico, in 1770, by Lorenzana, with those published in London by Purchas, and in Paris by Thevenot, to perceive and know the great difference there is between copy and original. But we do not mean to maintain the perfection of the original, copied by Purchas; we rather doubt not that they have been imperfect, as all the historical paintings were, in which the painters contented themselves with outlines, regardless of the proportions or colouring of objects, the light and shade, or rules of perspective. Nor was it possible they should observe those laws of the art, on account of their extraordinary expedition in making pictures, as Cortes, Diaz, and other eye-witnesses have attested. But let us observe the conclusions M. de Paw deduces from thence. His arguments are these: the Mexicans did not observe the laws of perspective in their paintings; they could not therefore, by means of them, perpetuate the memory of events: the Mexicans were wretched painters, therefore they could not be good historians; but at the same time that he makes use of this species of logic, he ought also to have said, that all those who in writing do not make good characters cannot be good historians; for that which letters are to our historians, were the figures of the Mexican historians; and as good histories may be written with a bad character, so may facts be well represented by coarse pictures; it is sufficient that either historian make himself understood.

But

But this is what Mr. de Paw cannot find in the copies made by Purchas. He declares that having compared the figures of them in different manners with the interpretations annexed, he could never discover any connection between them ; that which they interpret to be eight kings of Mexico, they might equally well interpret to be eight concubines of Montezuma. But the same thing might be said by M. de Paw, if the book *Chun-yum* of the philosopher Confucius, written in Chinese characters, was presented to him, with the interpretation in French beside it. He would compare in various modes those characters with the interpretations, and supposing that he could not find any connection between them, he might say, that as they interpret that book of the nine qualifications which a good emperor ought to have, they might also interpret it of nine concubines, or nine eunuchs of some ancient emperor, because he understands almost full as much of the Chinese characters as of the Mexican figures. If we had an interview with M. de Paw, we could explain to him what connection these figures have with their interpretation ; but, as he does not know it himself, he ought to take the judgment of those who understand them.

He believes, or would make us believe, that those pictures alone which Purchas copied, were saved from the burning made by the first missionaries ; but this is most erroneous, as we have already made appear against Robertson in the beginning of the first volume. The paintings saved from that burning were so many in number, that they supplied the materials for the ancient history of Mexico, not only to the Spanish writers but also to the Mexicans themselves. All the works of don Ferdinand Alba Ixtlilxochitl, of don Dominic Chimalpain,

pain, and others named in the catalogue of writers, at the beginning of this history, have been composed by the assistance of a great number of ancient paintings. The indefatigable Sahagun, consulted an infinity of paintings for his history of New Spain. Torquemada often cites the pictures which he examined for his work. Siguenza inherited the manuscripts and paintings of Ixtlilxochitl, and procured many others at a great expense, and after having made his extracts from them, left them at his death, together with his valuable library, to the college of St. Peter and St. Paul, of the Jesuits of Mexico; in which library we saw and studied some of those paintings. During the two last centuries, ancient paintings were frequently produced at tribunals by the Mexicans, as titles of property, and the possession of lands; and on that account, interpreters skilled in the significations of such paintings were consulted. Gonzalez Oviedo makes mention of that custom at tribunals in the times of Sebastiano Ramirez de Fuenleal, president of the royal audience of Mexico; and as the knowledge of such titles was of great importance to the decision of suits, there was formerly a professor in the university of Mexico, appointed to teach the science of Mexican paintings, hieroglyphics, and characters. The many pictures collected a few years ago by Boturini, and mentioned in the Catalogue of his museum, published at Madrid, in 1746, demonstrate, that not quite so few as M. de Paw and Dr. Robertson imagine, have escaped the burning by the missionaries.

In short, to confirm what we have written in this history, and let M. de Paw understand the variety of Mexican paintings, we shall mention here briefly what Dr. Eguiara has written in his learned Preface to his *Bibliotheca*

otheca Mexicana. "There were," he says, "among
 " the Mexican pictures those of the lunar course, called
 " by them *Tonalamatl*, in which they published their
 " prognostics respecting the changes of the moon. One
 " of those pictures is introduced by Siguenza, in his
 " *Ciclographia Mexicana*, as he himself acknowledges
 " in his work entitled, *Libra Astronomica*. Others
 " contained the horoscopes of children, in which they
 " represented their names, the day and sign of their
 " birth, and their fortune. Of this sort of painting,
 " mention is made by Jerom Roman, in his *Republic of*
 " *the World*, Part II. Tom. ii. Others were dogmati-
 " cal, containing the system of their religion; others
 " historical, others geographical, &c." "It is true,"
 adds the same author, "that those paintings which
 " were made for familiar and common use, were clear
 " and intelligible to every one: but those which con-
 " tained the secrets of religion were full of hierogly-
 " phics, the meaning of which could not be compre-
 " hended by the vulgar. There was great difference
 " in their paintings, both with respect to their authors,
 " and the method of doing them, and the design and
 " use of them. Those which were made for the orna-
 " ments of the palaces were perfect; but in others
 " containing some secret meaning, particular characters,
 " and some monstrous and horrible figures were em-
 " ployed. The painters were numerous; but the
 " writing of characters, the composing of annals, and
 " the treating of matters concerning religion and poli-
 " tics, were employments peculiar to the priests." So
 far EGUIARA.

M. de Paw will please to know therefore, that among
 the Mexican paintings some were mere images of ob-
 jects;

jects; they had also characters not composing words as ours do, but significative of things like those of astronomers and algebraists. Some paintings were solely intended to express ideas or conceptions, and, if we may say so, to write; but in these they paid no regard to proportion or beauty, because they were done in haste, and for the purpose of instructing the mind, not of pleasing the eye; in those, however, where they strove to imitate nature, and which they executed with that leisure which works of such kind require, they strictly observed the distances, proportions, attitudes, and rules of the art, though not with the perfection which we admire in the good painters of Europe. In short, we wish M. de Paw would shew us some rude or half-polished people of the old continent which has exerted so much industry and diligence as the Mexicans to perpetuate the memory of events.

Dr. Robertson, where he treats of the culture of the Mexicans in the seventh book of his History, explains the progress which human industry makes to arrive at the invention of letters, by the combinations of which are expressed all the different sounds of discourse. This successive progress, according to him, proceeds from actual painting to simple hieroglyphic, from it to allegorical symbols, from thence to arbitrary characters, and lastly to the alphabet. If any person would wish to know from his history to what degree the Mexicans were arrived, he certainly will not be able to find it; as that historical reasoner speaks with so much ambiguity, that sometimes it appears that he believes they were hardly arrived at the second degree, that is simple hieroglyphic; and sometimes it seems that he judges them arrived at the fourth degree or at arbitrary character.

But, independent of what he says, it is certain, that all the above mentioned ways of representing ideas, except that of the alphabet, were used by the Mexicans. Their numeral characters, and those signifying night, day, the year, the century, the heavens, the earth, the water, &c. perhaps were not truly arbitrary characters. The Mexicans were arrived then as far as the famous Chinese, after many ages of civilization. There is no difference between the one and the other, except that the Chinese characters are multiplied to such excess, that a whole life-time is not enough to learn them.

Dr. Robertson, far from denying, like Mr. de Paw, the secular wheels of the Mexicans, confesses their method of computing time, and says, that their having observed, that in eighteen months, of twenty days each, the course of the sun was not completed, they added the five days Nemontemi. “ This near approach to philosophical accuracy is a remarkable proof that the Mexicans had bestowed some attention upon enquiries and speculations to which men in their rude state never turn their thoughts (*b*).” What would he have said had he known, as appears from the chronology of the Mexicans, that they not only counted three hundred sixty-five days to the year, but also knew of the excess of about six hours in the solar over the civil year, and remedied the difference between them by means of thirteen intercalary days, which they added to their century of fifty-two years.

SECT.

(*b*) Hist. of America, book vii.

S E C T. V.

On the Arts of the Mexicans.

MR. de Paw, after having given a contemptuous description of Peru, and the barbarity of its inhabitants, speaks of Mexico, of which state, he says, there are as many falsities and miracles related as of Peru ; but it is certain, he adds, that those two nations were upon an equality ; whether we consider their government, their arts, or their instruments. Agriculture was abandoned by them, and their architecture most wretched : their paintings were coarse, and their arts very imperfect ; their fortifications, their palaces, and their temples, are mere fictions of the Spaniards. If the Mexicans, he says, had had fortifications, they would have sheltered themselves from the musketry, and those six poor pieces of cannon, which Cortes carried with him, would not have overthrown in a moment so many bastions and intrenchments. The walls of their buildings were only great stones, laid loosely, one upon another. The boasted palace, where the kings of Mexico resided, was a mere hut ; on which account, F. Cortes, finding no suitable habitation in all the capital of that state, was obliged to erect a palace for himself in haste, which still exists. It is not easy to enumerate the absurdities thrown out by M. de Paw on this subject : omitting, however, what belongs to Peru, we shall examine what he has written against the arts of the Mexicans.

Of their agriculture we have spoken in other places, where we have shewn, that the Mexicans not only cultivated most diligently all the lands of their empire, but
likewise

likewise by wonderful exertions of industry, created to themselves new territory for cultivation, by forming those floating fields and gardens on the water, which have been so highly celebrated by all the Spaniards and foreigners, and are still the admiration of all who sail upon those lakes. We have demonstrated that not only all the plants which were necessary for food, for clothing and medicine, but likewise the flowers and other vegetables which contributed solely to luxury and pleasure, were all most plentifully cultivated by them. Cortes, in his letters to Charles V. and Bernal Diaz, speak with astonishment of the famous gardens of Iztapalapan and Huaxtepec, which they saw; and they are also mentioned by Hernandez, in his Natural History, who saw these gardens forty years after. Cortes in a letter to Charles V. of the 30th of October, 1520, speaks thus: "The multitude of inhabitants in those countries is so great, that there is not a foot of land left uncultivated." It is being very obstinate to refuse faith to the unanimous testimony of the Spanish authors.

We have set forth, on the support of the same testimony, the great skill of the Mexicans in bringing up animals, in which kind of magnificence Montezuma surpassed all the kings of the world. The Mexicans could not have bred up such an infinite variety of quadrupeds, reptiles, and birds, without having great knowledge of their natures, their instinct, their habits of life, &c.

Their architecture is not to be compared with that of the Europeans, but it was certainly greatly superior to that of most of the people of Asia and Africa. Who would form a comparison between the houses, palaces, temples, bastions, aqueducts, and roads of the ancient
Mexicans,

Mexicans, with the miserable huts of the Tartars, Siberians, Arabs, and other wretched nations, which live between the Cape de Verd, and the Cape of Good Hope ; or the buildings of Ethiopia, of a great part of India, and the Asiatic and African isles, except those of Japan ?

M. de Paw says, the boasted palace of Montezuma was nothing else than a mere hut. But Cortes, Diaz, and the anonymous conqueror, who saw this palace so often, affirm the direct contrary. " He had," says Cortes, talking of Montezuma, " in this city of Mexico, such " houses for his habitation, so deserving of admiration, " that I cannot sufficiently express their grandeur and " excellence ; I shall therefore only say, that there are " none equal to them in Spain." Thus writes this conqueror to his king, without fear of being contradicted by his officers or soldiers, who had also themselves viewed the palaces of Mexico. The anonymous conqueror, in his curious and faithful relation, speaking of the buildings of Mexico, writes thus : " There were beautiful " houses belonging to the nobles, so grand and numerous in their apartments, with such admirable gardens " to them, that the sight of them filled us with astonishment and delight. I entered from curiosity four times " into a palace belonging to Montezuma, and having " pervaded it until I was weary, I came away at last " without having seen it all. Around a large court " they used to build sumptuous halls and chambers ; but " there was one above all so large that it was capable of " containing upwards of three thousand persons without " the least inconvenience : it was such, that in the gallery of it alone a little square was formed, where thirty men on horse-back might exercise." It is certain
from

from the affirmation of all the historians of Mexico, that the army under Cortes, consisting of six thousand four hundred men and upwards, including the allies, were all lodged in the palace formerly possessed by king Axajacatl; and there remained still sufficient lodging for Montezuma and his attendants, besides the magazine of the treasures of king Axajacatl. The same historians attest the most beautiful disposition of the palace of birds; and Cortes adds, that in the apartments belonging to it two princes might have been lodged with all their suit, and minutely describes its porticos, lodges, and gardens. He says also to Charles V. that he lodged in the palace of Nezahualpilli, at Tezcucó, with six hundred Spaniards, and forty horses, and that it was so large it could easily have lodged six hundred more. He speaks in a similar manner of the palaces of Iztapalapan, and other cities, praising their structure, their beauty, and magnificence. Such were the *buts* of the kings and chiefs of Mexico.

M. de Paw says, that Cortes made a palace be constructed in haste for his own habitation, because he could not find any one in all that capital sufficiently commodious; but M. de Paw is in a great mistake, or rather he asserts without truth, and condemns without reason. It is true that Cortes, during the siege of Mexico, burnt and demolished the greater part of that great city, as he himself relates; and for that end he had demanded and obtained from his allies some thousands of country people, who had no other employment than to pull down and destroy the houses and buildings as the Spaniards advanced into the city, that there might not remain behind them any house from which the Mexicans could annoy them. It is therefore not very wonderful that Cortes did not find a convenient habitation for himself in a city

city which he had himself destroyed; but the ruin of it was not so general, but that there remained a considerable number of houses in the division of Tlatelolco, where the Spaniards might have lodged conveniently, with a good number of allies. "Since it has pleased our Lord," says Cortes in his last letter to Charles the V. "that this great city of Tlatelolco should be conquered, I have not thought proper to reside in it on account of many inconveniences; I have therefore gone, with all my people, to stay at Cuyoacan." Had what M. de Paw says been true, it would have been sufficient for Cortes to have said that he did not remain in Mexico because there were no houses left fit to be inhabited. The palace of Cortes was erected in the same place where formerly that of Montezuma stood. If Cortes had not ruined this palace, he might have lodged conveniently in it, as that monarch had done, with all his court. It is false that the palace erected for Cortes is still in existence; it was burnt in the time of a popular sedition, in 1692. But it is still false that the walls of the Mexican houses were only loose stones laid one upon another without any cement, as the contrary is proved by the testimony of all historians, and by the remains of ancient buildings, of which we shall speak in their place. From hence it appears, that the whole passage above cited from M. de Paw, is idle and fictitious.

M. de Paw, not contented with annihilating the houses of the Mexicans, engages also with their temples; and in anger against Solis, because he affirms that the temples of Mexico were not less than two thousand in number, including large and small, writes thus, "There never has been so great a collection of houses in any city from Pekin to Rome, on which account Gomara, less

“ less rash or more discerning than Solis, says, that computing seven chapels, there were not more than eight places destined for the repositories of the idols of Mexico.” In order to shew the unfaithfulness of M. de Paw in citing authors, we shall insert the passage from Gomara to which he alludes. “ There were,” says Gomara, in chapter eighty of his Chronicle of New Spain, “ many temples in the city of Mexico, scattered through the different districts, that had their towers, in which were the chapels and altars for the repositories of the idols—They had almost all the same form, so that what we shall say of the principal temple will suffice to explain all the others.” And after making a minute description of that great temple, of which he boasts the height, largeness, and beauty, he adds, “ Besides those towers, which were formed with their chapels above the pyramid, there were more than forty other towers, great and small, in other smaller *Teocalli* (i), which were within the inclosure of that principal temple, all of which were the same in form . . . There were other *Teocalli* or *Cues* in other places of the city . . . All those temples had houses belonging to them, their priests, and their gods, together with every thing necessary for their worship and service.” So that Gomara, who, according to M. de Paw, does not enumerate in Mexico more than eight places destined for the repositories of the idols, including seven chapels, reckons clearly more than forty temples within the inclosure of the principal temple, besides many others scattered through the other districts of the city. Can we give any faith to M. de Paw after so manifest a falsification?

It

(i) *Teocalli*, the house of God, was the name which the Mexicans gave to their temple.

It is true that Solis was inconsiderate in asserting that number of temples for a certainty which the first historians mentioned only from conjecture. But M. de Paw shews himself not very discerning in including amongst the public buildings those chapels also which the Spaniards call temples. Of these the quantity was innumerable; all those who saw that country before the conquest testify unanimously, that not only in the inhabited places, but on the roads and mountains they saw such kinds of buildings, which, although small and totally different from our churches, were yet called temples, because they were consecrated to the worship of the idols. From the letters of Cortes, as well as from the history of Diaz, we know that the conquerors hardly went a step in their expeditions without meeting with some temple or chapel. Cortes says he numbered more than four hundred temples in the city of Cholula alone. But there was a great difference in the size of the temples. Some were nothing else than small terrasses of little height, upon which was a little chapel for the tutelar idol. Others were of stupendous dimensions. Cortes, where he speaks of the greater temple of Mexico, declares to the emperor, that it is difficult to describe its parts, its grandeur, and the things contained in it; that it was so large, that within the inclosure of that strong wall which surrounded it, a village of five hundred houses might be contained. This and the other temples of Mexico, Tezcuco, Cholula, and other cities, are spoken of in the same stile by B. Diaz, the anonymous conqueror, Sahagun, and Tobar, who saw them, and the Mexican and Spanish historians, who wrote after them and informed themselves accurately on the subject. Hernandez described one by one, the seventy-eight parts of which the greater temple was composed.

posed. Cortes adds, that among the high towers which adorned that great capital were forty, so elevated that the smallest of them was not inferior in height to the famous *Giralda* (k) of Seville. D. F. de A. Ixtlilxochitl makes mention in his manuscripts of the tower of nine floors, that his famous ancestor Nezahualpilli, erected to the Creator of heaven, which appears to have been that famous temple of Tezcutzinco, so much extolled by Valades in his work.

All this cloud of witnesses depose against M. de Paw. Notwithstanding he cannot believe in that great multitude of temples in Mexico, because he says Montezuma I. was he who gave the form of a city to that village: from the reign of this monarch until the arrival of the Spaniards, no more than forty-two years elapsed, which space of time is not sufficient to build two thousand temples. These three assertions, make, as is usual with this author, as many errors. 1. It is false that Montezuma I. gave the form of a city to Mexico, because we know from history that that court had the form of a city from the time of Acamapitzin the first king. 2. It is false, besides, that there intervened but forty-two years between the reign of Montezuma and the arrival of the Spaniards. Montezuma began to reign, as we have shewn in Dissertation second, in the year 1436, and died in 1465, and the Spaniards did not come to Mexico before 1519. Therefore, from the beginning of that reign until the arrival of the Spaniards elapsed eighty-three years, and from the death of that king till then fifty-five. 3. M. de Paw discovers his total ignorance of the structure of the Mexican temples, nor does he know what

(k) The very lofty and famous steeple of the Dome of Seville.

what multitude of workmen assembled for the construction of the public edifices, and what expedition they made in building. In those times a whole village has been raised, though composed of huts of wood, covered or thatched with hay or straw, and the new settlers have conducted their families, their animals, and all their other property to it, in one single night.

As to their fortifications it is certain and indubitable, from the depositions made by Cortes and all those who saw the ancient cities of that empire, that the Mexicans, and all the other neighbouring nations living in societies, raised walls, bastions, palisades, ditches, and intrenchments for their defence. But without the attestations of those eye-witnesses, the ancient fortifications which still exist in *Quauhatochco* or *Guaatusco*, and near to *Molcaxac*, would be sufficient to shew the error of M. de Paw. It is true that such fortifications were not comparable to those of the Europeans, because neither was their military architecture perfected, nor had they occasion to cover themselves from artillery, of which they had no experience or conception : but they gave plain proofs of their industry in inventing many different kinds of expedients to defend themselves from their native enemies. Whoever will read the unanimous depositions of the conquerors, will not entertain a doubt of the great difficulty they found in taking the ditches and intrenchments of the Mexicans during the siege of that capital, although they had such an excessive number of troops of allies, and the advantages of fire arms, and the brigantines. The terrible defeat the Spaniards met with when they meant to have retired in secret from Mexico, will not suffer a doubt to remain concerning the fortifications of that capital. It was not surrounded by walls, because its situation was rendered

rendered secure by ditches which intersected all the roads by which an enemy could approach; but other cities which were not placed in so advantageous a situation, had walls and other means of defence. Cortes himself gives an exact description of the walls of Quauhquechollan.

But it is not necessary to consume time in accumulating testimonies and other proofs of the architecture of the Mexicans, while they have left, in the three roads which they formed upon the lake itself, and the very ancient aqueduct of Chapoltepec, an immortal monument of their industry.

The same authors who attest the architectural skill of the Mexicans, witness also the ingenuity of their goldsmiths, their weavers, their gem-cutters, and their artificers of works of feathers. Many Europeans who saw such kind of works were astonished at the abilities of the American artists. Their art in casting metals was admired by the goldsmiths of Europe, as many European writers, then living, have said; and amongst others the historian Gomara, who had the works in his hands, and heard the opinion of the Sevillian goldsmiths concerning them, who despaired of ever being able to imitate them. When shall we find any one capable of making those wonderful works already mentioned by us, in Book VIII. Sect. 51. of this history, and attested by many writers, namely that, for instance, of casting a fish, which should have its scales alternately, one of gold and the other of silver? Cortes says, in his second letter to Charles V. that the images made of gold and feathers were so well wrought by the Mexicans that no workman of Europe could make any better; that in respect to jewels, he could not comprehend by what instruments

struments their works were made so perfect; and their feather-works could not be imitated either by wax or silk. In this third letter, where he speaks of the plunder of Mexico, he says, that among the spoils of Mexico he found there certain wheels of gold, and feathers, and other labours of the same matter, so wonderfully executed, that being incapable to convey a just idea of them in writing, he sent them to his majesty that he might be assured by his own sight of their excellence and perfection. We are certain that Cortes would not have spoken in that manner to his king of those works, which he sent him in order that he might view them, if they had not been such as he represented. Bernal Diaz, the anonymous conqueror, Gomara, Hernandez, and Acosta, and all those authors who saw them, speak of them in the same manner.

Dr. Robertson (*l*) acknowledges the testimony of the ancient Spanish historians, and believes that they had no intention to deceive us; but he affirms that they were all induced to exaggerate from the illusion of their senses produced by the warmth of their imagination. Such a solution might be made use of to deny faith to all human historians. All therefore must have been deceived, without excepting even the celebrated Acosta, or the learned Hernandez, the gold-smiths of Seville, king Philip II. or Pope Sextus V. who were all admirers, and praised those Mexican labours (*m*)! their imaginations were all heated, even those who wrote some years after the discovery of Mexico! Robertson the Scotsman, and de Paw the Prussian, after two centuries and a half have alone that temperance of imagination which is required to

(*l*) History of America, book vii.

(*m*) See our Seventh book.

to form a just idea of things, perhaps, because the cold of their climes has checked the heat of their imaginations. "It is not from those descriptions," adds Robertson, "but from considering such specimens of this art "are still preserved, that we must decide concerning "their degree of merit. . . . Many of their ornaments in "gold and silver, as well as various utensils employed in "common life, are deposited in the magnificent cabinet "of natural and artificial productions, lately opened, and "I am informed, by persons on whose judgment and "taste I can rely, that these boasted efforts of their art "are uncouth representations of common objects, or very coarse images of the human and some other forms, "destitute of grace and propriety." And in a note he says, "in the armory of the royal palace of Madrid "are shewn suits of armour, which are called Montezuma's. They are composed of thin lackered copper-plates. In the opinion of very intelligent judges they "are evidently eastern. The forms of the silver ornaments upon them may be considered as a confirmation "of this. They are infinitely superior in point of workmanship to any effort of American art. The only unquestionable specimen of Mexican art that I know of "in Great Britain, is a cup of very fine gold, which is "said to have belonged to Montezuma. A man's head "is represented on this cup. On one side the full face, "on another the profile, and on a third the back parts "of the head. The features are rude, but very tolerable, and certainly too rude for Spanish workmanship. "This cup was purchased by Edward Earl of Oxford, "while he lay in the harbour of Cadiz." Thus far Robertson, to whom we answer, first, That there is no reason to believe that those rude works are really Mexican ;

can; secondly, That neither do we know whether those persons in whose judgment he could confide, may be persons fit to merit our faith: because we have observed that Robertson trusts frequently to the testimony of Gages, Corral, Ibagnez, and other such authors, who are entirely undeserving of credit. Possibly those persons who gave their judgment of such labours had their imaginations heated also; as it is easier, according to the state of our degenerate nature, to feel the imagination heated against a nation than in favour of it. Thirdly, It is more probable that those arms of copper, believed by intelligent judges to be certainly oriental, are really Mexican, because we are certain, from the testimony of all the writers of Mexico, that those nations used such plates of copper in war, and that they covered their breasts, their arms, and thighs with them, to defend themselves from arrows; whereas we do not know that such were ever in use among the inhabitants of the Philippine isles (*n*) or among any other people who had commerce with them. The dragons represented in those arms, instead of confirming, as Robertson thinks, the opinion of those who think them oriental, rather strengthen our opinion, because there never was any nation in the world which used the images of terrible animals on their arms so much as the Mexicans. Nor is it matter of wonder that they had an idea of dragons while they had ideas of griffins, as Gomara attests (*o*). Fifthly, That although the images formed in these works of gold and silver are rude, they might still be excellent, wonderful, and inimitable; because in those works two distinct points ought to be considered;

(*n*) Dr. Robertson says, that the Spaniards had those arms possibly from the Philippine isles.

(*o*) Chronicle of New Spain, chap. xxi.

considered; that of the design, and that of the casting; so that the fish, of which we have made mention above, might be ill formed as to figure, and yet wonderful and surprising in that alternation in the scales of gold and silver, done by cast work. Sixthly and lastly, The judgment of some persons entirely unknown upon those few doubtful works which are in the royal cabinet of Madrid, should not avail against the unanimous depositions of all ancient writers, who certainly saw innumerable labours of this kind which were really Mexican.

From what we have said, it is manifest that M. de Paw has done the greatest injustice to the Mexicans, in believing them inferior in industry and sagacity to the rudest people of the old continent. Acosta, when he treats of the industry of the Peruvians speaks thus: "If those men are beasts, let who will judge; since I am certain, that in that to which they apply themselves, they excel us." This ingenuous confession of a European of so much criticism, so much experience, and so much impartiality, is certainly of more weight than the airy speculations of any Prussian philosopher, or all the reasoning of a Scottish historian; the one and the other ill informed in the affairs of America, or prejudiced against it. But although we should grant to M. de Paw, that the industry of the Americans in the arts is inferior to that of other people in the world, he can infer nothing from them against the talents of the Americans, or the clime of America: as it is certain and indubitable, that the invention and progress of arts are generally more owing to chance, avarice, and necessity, than genius. The men the most industrious are not always the most ingenious in arts, but often the most necessitous, or eager for gold, are so. The barrenness of the earth, says Montesquieu, makes

makes men industrious (*p*). It is necessary that they procure to themselves that which the earth does not yield them. The fertility of a country from the facility with which he is supported, begets indolence in man. “Necessity,” says Robertson, “is the spur and guide of the human race to inventions.” The Chinese certainly would never have been so industrious, if the excessive populousness of their country had not rendered their support difficult ; nor would Europe have made such progress in the arts, if artists had not been encouraged by rewards and the hopes of acquiring fortune. Nevertheless, the Mexicans could boast of many inventions worthy of immortalizing their name, such as, besides those of casting metals and mosaic works of feathers and shells, the art of making paper (*q*) ; those of dying with indelible colours, spinning and weaving the finest hair of the rabbits and hares ; making razors of Itzli (*r*) ; breeding so industriously the cochineal to make use of its colours ; making cement for the pavements of their houses, and many others not less valuable, as may be known from the works of the historians of Mexico. But where is the wonder that such inventions were found among those civilized nations, while, amongst other people of America, less polished, arts of the most singular nature have been discovered ? What art more wonderful, for example, than that of taming sea-fish, and employing them to chase other large fish, as the inhabitants of the Antilles

VOL. III.

Y y

used

(*p*) *Esprit des Loix*, liv. xviii. chap. 4.

(*q*) The invention of paper is certainly more ancient in America than in Egypt, from whence it was communicated to Europe ; it is true, that the paper of the Mexicans was not comparable to the paper of the Europeans ; but it ought to be observed that the former did not make theirs for writing but painting.

(*r*) See Book VII. sect. 56. of this history, respecting that art.

used to do. This art alone, of which Oveido (*s*), Gomara, and other authors make mention, would be sufficient to refute the charge of want of industry among the Americans.

S E C T. VI.

Of the Languages of the Americans.

“THE languages of America, says M. de Paw, are so limited, and so scarce of words, that it is impossible to express any metaphysical idea in them. In no one of those languages can they count above the number three (*t*). It is impossible to translate a book either into the languages of the Algonquines, or Paraguese, or even into those of Mexico or Peru, on account of their not having sufficient plenty of proper terms to express general ideas.” Whoever reads those dogmatical decisions of M. de Paw, will be persuaded, undoubtedly, that he determines after having travelled through all America, after having had commerce with all those nations, and after having examined all their languages. But it is not so. M. de Paw, without moving from his closet at Berlin, knows the things of America better than the Americans themselves, and in the knowledge of their different languages even excels those who

(*s*) Oviedo Stor. Gener. e Nat. lib. xiii. cap. 10. Sommario della Stor. &c. cap. 8. Gomara Storia Gener. cap. 20. The species of fish which the Indians trained to chase large fish, as they train hawks in Europe, to chase other birds was rather small, called by them *Guaican*, and by the Spaniards *Reverso*. Oviedo explains the manner in which they made use of the fish to chase others.

(*t*) In the same section i. of the 5th part of the *Recherches Philosophiques*, in which he affirms, that no language of America had terms to count more than three, he says the Mexicans could count as high as ten.

who speak them. We have learned the Mexican, and have heard it spoken by the Mexicans for many years ; but never knew that it was deficient in numerical terms, and words signifying universal ideas, until M. de Paw gave us that information. We know that the Mexicans gave the name of *Centzontli* (four hundred), or rather that of *Centzontlatale* (he who has four hundred words), to that bird which is so renowned for its sweetness and matchless variety of song. We know besides that the Mexicans anciently counted by *Xiquipilli*, and the nuts of the cacao, in their commerce, and in numbering their troops of war ; that *Xiquipilli* was eight thousand ; so that when they said that an army consisted of forty thousand, they expressed that it had five *Xiquipilli*. We know lastly, that the Mexicans had numeral words to express as many thousands, or millions, as they pleased ; but M. de Paw knows the direct contrary, and there is not a doubt but he knows better than us ; because we had the misfortune to be born under a climate less favourable to the operations of the intellect. Nevertheless, we shall subjoin, to satisfy the curiosity of our readers, the series of numerical terms which the Mexicans have always employed (*u*). It will appear thence, that those who had

(*u*) Numeral Terms of the Mexican Language.

| | | | | | | | |
|-----|---|----------|---|------------|---|------------|----|
| Ce | 1 | Nahui | 4 | Chicome | 7 | Matlachtli | 10 |
| Ome | 2 | Mocuilli | 5 | Chicuei | 8 | Chaxtolli | 15 |
| Jei | 3 | Chicuace | 6 | Chiucnahui | 9 | | |

With these terms differently combined together with these three following, *Pobualli* or *Poalli* 20, *Tzontli* 400, and *Xiquipilli* 8000, they express any quantity, thus :

| | | | |
|-------------------------------|----|-----------------|----------|
| Cem poalli | 20 | Nauhpoalli | 80 |
| Ompoalli | 40 | Macuilpoalli | 100 |
| Epoalli | 60 | Chicuacempoalli | 120, &c. |
| Matlacpoalli ten times 20 | | | 200 |
| Caxtolpoalli fifteen times 20 | | | 300 |

Thus they proceed until they come to 400.

Centzontli

had not, according to M. de Paw, numeral words to count above three, had, in spite of his ignorance, words to count to at least forty-eight millions. In like manner, we could expose the error of M. Condamine and M. de Paw, in many other languages of America, and even in those which are reckoned the most barbarous; as there are in Italy at present persons acquainted with the new world, and capable of giving an account of more than sixty American languages. Among the materials we collected for this work, we have the numeral words of the Araucan language, which although it is a more warlike than civilized nation, has words to express millions.

M. de Paw is not less wrong in affirming, that the languages of America are so poor, that they cannot express a metaphysical idea; which opinion M. de Paw has learned of M. Condamine. Time, says this philosopher, treating of the languages of America, duration, space, being, substance, matter, body, all these words, and many others, have no equivalents to them in their languages; and

| | | | |
|---------------------------------|------|-----------------|-----------|
| Centzontli | 400 | Nachtzontli | 1600 |
| Ontzontli | 800 | Macuilzontli | 2000 |
| Etzontli, | 1200 | Chicuacenzontli | 2400, &c. |
| Matlaczontli ten times 400 | | | 4000 |
| Caltoltzontli fifteen times 400 | | | 6000 |

Thus they go on to 8000.

| | | | |
|--|-------|---------------------|-----------------|
| Ce-xiquipilli | 8000 | Nauhxiquipilli | 32,000 |
| Onxiquipilli | 16000 | Macuilxiquipilli | 40,000 |
| Exiquipilli | 24000 | Chicuacenziquipilli | 48,000, &c. |
| Matlaxiquipilli ten times 8000 | | | 80,000 |
| Caxtolxiquipilli fifteen times 8000 | | | 120,000 |
| Cempoalxiquipilli twenty times 8000 | | | 160,000 |
| Ompoalxiquipilli forty times 8000 | | | 320,000, &c. |
| Centzonxiquipilli four hundred times 8000 | | | 3,200,000 |
| Ontzonxiquipilli eight hundred times 8000 | | | 6,400,000 |
| Matla&zonxiquipilli four thousand times 8000 | | | 32,000,000 |
| Caltoltzonxiquipilli six thousand times 8000 | | | 48,000,000, &c. |

We mentioned that they had words to count as far as forty-eight millions at least, but those above are sufficient to confute M. de Paw.

and not only the names of metaphysical beings, but also those of moral beings cannot be expressed, unless imperfectly and by long circumlocutions. But M. Condamine knew as much of the language of America as M. de Paw; and he certainly gained his information from some ignorant person, which is a usual case with travellers. We are perfectly sure that many American languages have not that poverty Mr. Condamine ascribes to them; but without attending to that we shall examine the state of the Mexican.

It is very true, that the Mexicans had no words to express such conceptions, as matter, substance, accident, and the like; but it is equally so, that no language of Asia, or Europe, had such words before the Greeks began to refine and abstract their ideas, and to create new terms to express them. The great Cicero, who knew the Latin language so well, and flourished in those times when it was at its greatest perfection, although he esteemed it more copious than the Greek, is often at the greatest difficulty in his philosophical works, to find words corresponding to the metaphysical ideas of the Greeks. How often was he constrained to create new terms equivalent in some manner to those of the Greek, because he could not find any such in use among the Romans; but even at this day, after that language has been enriched by Cicero, and other learned Romans, who, after his example, applied themselves to the study of philosophy, many terms are wanting to express metaphysical notions, unless recourse is had to the barbarous Latin of the schools. None of those languages which are spoken by the philosophers of Europe, had words signifying matter, substance, accident, and other similar ideas; and therefore it was necessary that
philosophers

philosophers should adopt the words of the Latin, or the Greek. The ancient Mexicans, because they had no concern with the study of metaphysics, are very excusable for not having invented words to express those ideas ; their language, however, is not wanting in terms signifying metaphysical and moral things, as Condamine affirms those of South America to be ; we, on the contrary, affirm, that it is not easy to find a language more fit to treat on metaphysical subjects than the Mexican ; as it would be difficult to find another which abounds so much as it in abstract terms ; for there are few verbs in it from which are not formed verbals corresponding with those in *io* of the Romans ; and but few substantive or adjective nouns from which are not formed abstracts expressing the being, or, as they say in the schools, the quiddity of things : equivalents to which we cannot find in the Hebrew, in the Greek, in the Latin, in the French, in the Italian, in the English, in the Spanish, or Portuguese ; of which languages, we presume, at least, to have sufficient knowledge, to make a comparison. In order to give some specimen of this language to the curious among our readers, we subjoin some words signifying metaphysical and moral ideas, which are understood by the rudest Indians (*).

The

(*) Specimen of words in the Mexican language, signifying moral and metaphysical conceptions.

| | | | |
|---------------------|-------------|-------------------|-----------------------|
| Tlamantli | King | Jeitiliztli | Trinity, &c. |
| Jeliztli | Effence | Teotl | God |
| Qualoti | Goodness | Teojotl | Divinity |
| Neltiliztli | Truth | Tloque | He who has every |
| Nejolnonotzaliztli | Reflexion | Nahuaque | thing within himself. |
| Tlachtopaittaliztli | Forefight | Ipalnemoani | Him by whom we live |
| Nejeltzotzonaliztli | Doubt | Amacacacani | Incomprehensible |
| Tlalnamiquiliztli | Remembrance | Cemicacjeni | Eternal |
| Cetiliztli | Unity | Cenmancanjelitzli | Eternity |
| Ometiliztli | Binity | Cahuitl | Time |
| | | | Cenjocojani |

The excessive abundance of words of this nature has been the reason that the deepest mysteries of religion have been explained in the Mexican language without great difficulty, and that some books of the Holy Writings have been translated into it; amongst which are those of the Proverbs of Solomon, and the Apostles; which like those of Thomas Kempis, and others, translated into Mexican, could not have been done into those languages which are wanting in terms of metaphysical and moral ideas. The books published in Mexico on religion are so numerous, that of them alone might be formed a large library. To this Dissertation we shall add a short catalogue of the principal Mexican authors, in gratitude to their labours, as well as to illustrate what we have advanced.

What we have said of the Mexicans, we may, in great part, affirm also of the other languages spoken in the dominions of Mexico; as there are Dictionaries and Grammars of them, as well as of the Mexican, and treatises in religion have been published in them all.

Those

| | | | |
|----------------------|----------------|----------------------------|-------------|
| Cenjocojani | Creator of all | Nejoltquipacholiztli | Repentance |
| Cenhuelitini | Omnipotent | Ellehutliztli | Desire |
| Cenhueliciliztli | Omnipotence | Qualtihuani | } Virtue |
| Tlacatl | Person | Jeçtihuani | |
| Tlacajotl | Personality | Aquallotl | Malice |
| Tajotl | Fatherhood | Tolchicahualiztli | Strength |
| Nanjotl | Motherhood | Tlaixjejecoliztli | Temperance |
| Tlalticpac&tlacajotl | Humanity | Jollomachiliztli | Prudence |
| Tejolia | Soul | Tlamelahuacachicahualiztli | Justice |
| Teixtlamatia | Mind | Jolhueiliztli | Magnanimity |
| Tlamatiliztli | Wisdom | Tlapaccaihijohuiliztli | Patience |
| Ixtlamachiliztli | Reason | Tlanemaçtiliztli | Liberality |
| Ixaxiliztli | Comprehension | Paccanemiliztli | Gentleness |
| Tlaiximatiliztli | Knowledge | Tlatlacajotl | Benignity |
| Tlanemiliztli | Thought | Necnomatiliztli | Humility |
| Tlalcachualiztli | Forgetfulness | Tlazocamatiliztli | Gratitude |
| Tlazotlaliztli | Love | Nepohualiztli | Pride |
| Tlacocoliztli | Hatred | Teojehuacatiliztli | Avarice |
| Tlamahtiliztli | Fear | Nexicolitli | Envy |
| Netemachiliztli | Hope | Tlatzihuiliztli | Sloth |
| Necocoliztli | Pain | | |

Those Europeans who have learned the Mexican tongue give it the highest praises, and equal it to the Latin ; some to the Greek, as we have already observed. Boturini affirms, that in urbanity, politeness, and sublimity of expressions, no language can be compared with the Mexican. This author was not a Spaniard, but Milanese, learned and critical. He knew at least the Latin, Italian, French, and Spanish, and of the Mexican so much as to be able to make the comparative judgment. Let M. de Paw, therefore, observe his error, and learn not to decide on matters of which he is ignorant.

Among the proofs on which count de Buffon would rest his system of the recent organization of the matter of the new world, he says, that the organs of the Americans were rude, and their language barbarous. “ Observe,” he adds, “ the list of their animals, their names are so difficult to be pronounced, it is wonderful that any European ever took the trouble of writing them ;” but we do not so much wonder at their taking the trouble of writing them as at their negligence in copying them. Among all the European authors who have written the natural and civil history of Mexico, in Europe, we meet with no one who has not so much altered the names of persons, animals, and cities, that it is impossible to guess at what they mean. The history of the animals of Mexico passed from the hands of Hernandez to N. A. Recchi, who knew nothing of the Mexican ; from Recchi, to the Lincean academicians at Rome, who have published it with notes and dissertations ; and count de Buffon made use of this edition. Among the hands of so many Europeans ignorant of the Mexican language, the names of the animals could not
at

at least escape alteration. To shew the alterations which they have suffered in the hands of count de Buffon, it will be sufficient to compare the Mexican names in the history of that philosopher, with those of the Roman edition of Hernandez. It is certain, that the difficulty which we find to pronounce a language to which we are not accustomed, and particularly if the articulation of it is different from that of our own, is no proof that it is barbarous. The same difficulty which count de Buffon finds to pronounce the Mexican names, would be felt by a Mexican who would pronounce the French names. Those who are accustomed to the Spanish language find great difficulty to pronounce the German and Polish, and esteem them the most tough and harsh of all languages. The Mexican language has not been our mother tongue, nor did we learn it in infancy; yet the Mexican names produced by count de Buffon as an argument of the barbarity of that tongue, appear to us beyond comparison more easy to be pronounced than many others taken from other European languages, which he adopts in his Natural History (*y*); and, perhaps, will appear so to many Europeans who are not used to either of the languages; and there will not be wanting persons who will wonder that count de Buffon has taken the trouble to write those names which are capable of terrifying the most courageous readers. In

VOL. III. Z z short,

(*y*) The reader will please to read and compare the following names which the count de Buffon has adopted with those which he has taken and altered from the Mexican language:

| | | |
|-------------------|------------------|---------------|
| Baurd manet-jes | Miszorzechovva | Niedzviedz |
| Brand hirts | Stachel-schvvein | Przavviafska |
| Chemik-skarzecfek | Scebeuschlafer | Meer-schvvein |
| Ildgiers diur | Sterzeczeleck | Sczurcz, &c. |

short, with respect to the American languages he ought to repose in the judgment of those Europeans who have known them, rather than in the opinion of those who have not.

S E C T. VII.

Of the Laws of the Mexicans.

MR. de Paw, desirous of opposing that antiquity which Gemelli, by mistake, has attributed to the court of Mexico, alleges *the anarchy of their government, and the scarcity of their laws*; and treating of the government of the Peruvians, says, that there cannot be laws in a state of despotism; and although they may have once been, it is impossible to make an analysis of them, because we do not know them; nor can we know them, because they were never written, and the memory of them necessarily terminated with the death of those who knew them.

No body has made mention of the anarchy of the kingdom of Mexico till M. de Paw came to the world, whose brain seems to have a particular organization to understand things in a manner contrary to all other men. No person is so ignorant of the history of Mexico, as not to know that those people were subjected to particular heads and the whole state to a chief who was king of Mexico. All historians record the great authority of that sovereign, and the high respect his vassals bore him: if this is anarchy, then all the states of the world are surely anarchised.

Despotism was not introduced into Mexico until the last years of the monarchy: in prior times the kings had always respected the laws established by their ancestors,
and

and attended zealously to the observance of them. Even in the reign of Montezuma II. who was the only truly despotic king, the magistrates governed according to the laws, and Montezuma himself punished transgressors severely ; and abused his power only in things which served to increase his wealth and his authority.

Those laws were never written, but they were perpetuated in the memories of men, not only by tradition but also by paintings. No subject was ignorant of them, because fathers of families did not fail to instruct their children in them, that they might avoid transgression, and escape punishment. The copies of the paintings of the laws were unquestionably infinite in number, because, although they underwent a furious persecution from the Spaniards, we have seen many of them. The understanding of those paintings is not difficult to any person, who has a knowledge of the manner in which the Mexicans usually represented things, the characters which they made use of, and their language ; but to M. de Paw they would be as unintelligible as those of the Chinese expressed in the proper characters of that nation. Besides, after the conquest many intelligent Mexicans wrote in European characters the laws of Mexico, Acolhuacan, Tezcuco, Michuacan, &c. ; amongst others, D. F. de Alba Ixtlilxochitl, wrote in Spanish the eighty laws formerly published by his ancestor king Nezahualcojotl, as we have already mentioned. The Spaniards afterwards investigated the laws of those nations with more diligence than any other part of their history, because the knowledge of them was essentially requisite to the christian government civil and ecclesiastical ; particularly in respect to marriages, the privileges of the nobility, the conditions of vassalage, and of slaves. They gained information

tion from the mouths of the Indians who were the best instructed, and they studied their ancient paintings. Besides the first missionaries, who laboured successfully in this undertaking, D. A. Zurita one of the principal judges of Mexico, learned on the subject of the law, and acquainted with those countries, made diligent enquiry, by order of the catholic king, into their government and composed that very useful work, which we have mentioned in our catalogue of writers of the ancient history of Mexico. Thus the laws of the Mexicans came to be known although they were never written.

But what sort of laws? "Many of them worthy," says Acolta, "of our admiration, and according to "which those nations should still be governed in their "Christianity." The constitution of their state, with respect to the succession to the crown, could not have been better framed, as by means of it they not only avoided the inconveniencies of hereditary succession, but those of election also. An individual of the royal family was always chosen king, both to preserve the dignity and splendour of the crown, and to hinder the throne from ever being occupied by a man of low birth. As a son did not succeed but a brother, there was no danger of so high and important a charge being exposed to the indiscretion of a youth, or the stratagems of an ambitious regent.

If the brothers had succeeded according to the order of their birth, the crown would necessarily have sometimes fallen to a person unfit to govern; and it could have happened besides, that the presumptive heir might plot against the life of the sovereign. Both those inconveniencies were obviated by the election. The electors chose first among the brothers of the deceased kings; and

and on failure of brothers, among the sons of former kings, the fittest person for the command of the nation. If it had been in the power of the king to have named the electors, he could have chosen those who would have been most favourable to his designs, and procured their votes in favour of that brother who was most dear to him, or perhaps in favour of a son, without adhering to the fundamental laws of the state ; but it was otherwise, for the electors themselves were elected by the body of the nobility, which included the suffrages of the whole nation. If the office of the electors had been perpetual, they might, by an abuse of their authority, have become the patrons of the monarchy ; but as their electoral power finished with the first election, and other new electors were chosen for the next election, it was not easy for ambition to usurp authority. Lastly, To avoid other inconveniences, the real electors were not more than four in number, men of the first nobility, of known probity and prudence. It is true, that after all those precautions, disorders could not always be avoided : but what government amongst men has not been exposed to greater evils ?

The Mexican nation was warlike, and required a chief who was intrepid, and experienced in the art of war ; what custom, therefore, could be more conducive to such end, than that of not electing any one king who had not, by his merits, obtained the charge of general of the army ; and of not crowning him who had not, after his election, taken himself the victims which, according to their system of religion, were to be sacrificed at the festival of his coronation.

The speed with which the Mexicans threw off the Tepanecan yoke, and the glory they acquired by their arms

arms in the conquest of Azcapozalco, naturally excited the rivalry and jealousy of their neighbours, and particularly the king of Acolhuacan, who had been, and was at that time, the greatest king of all that land ; but the throne of Mexico being still in a tottering condition, required a firm prop to support it. The king of Acolhuacan, who had recently recovered, by the aid of the Mexicans, that crown which had been usurped by the tyrant Tezozomoc, had reason to apprehend some powerful subject, following the steps of that tyrant, might excite a rebellion in his kingdom, and deprive him, like his father, of his crown and his life. The king of Tlacopan, who was on a newly established throne not very powerful, had still more to fear. Each of those kings by himself was in no state of security, and had reason to be diffident of the other two ; but by uniting together, they could form an invincible power. They therefore made a triple alliance, which rendered each of them secure with respect to the other two, and all three so with regard to their subjects. This was the alliance which fortified the thrones of Acolhuacan and Tacuba, and paved the way for the conquests of the Mexicans ; an alliance so firm and well concerted, that it lasted until the arrival of the Spaniards. This single political arrangement is sufficient to evince the discernment and sagacity of those nations.

The judicial forms of the Mexicans and Tezcucans afford many useful political lessons. The diversity of rank in the magistrates contributed to good order ; their attendance in the tribunals, from the break of day until the evening shortened the process of causes, and prevented many clandestine practices which might have interested their decisions. The capital punishments prescribed against prevaricators of justice, the punctuality of their execution,

tion, and the vigilance of the sovereigns, kept the magistrates in check ; and that care which was taken to supply them with every necessary at the expense of the king, rendered any misconduct in them inexcusable. Those assemblies which were held before the sovereign every twenty days, and particularly that general assembly of the whole of the magistrates every eighty days, to terminate all causes then depending, besides avoiding all the evils occasioned by the delay of justice, were productive of a communication between the magistrates of their different lights, made the king know those whom he had constituted the delegates of his authority, innocence had more resources, and the form of judicature rendered justice still more respectable. That law which permitted an appeal from the Tribunal of the Tlacatecatl to that of the Cihuacoatl in criminal but not in civil causes, evinces that the Mexicans, respecting the laws of humanity, discerned, that there was more required to prove a man guilty of such crimes than to declare him a debtor. In the trials of the Mexicans they admitted no other proof against the accused than that of witnesses. They never made use of the torture to make the innocent declare themselves guilty, nor those barbarous proofs by duel, fire, boiling-water, and such like, that were formerly so frequent in Europe, and which we now read of in history with amazement and abhorrence. “ There will be “ no person who will not wonder,” says Montesquieu, speaking on this subject, “ that our ancestors made the “ same, fortune, and property of citizens depend on certain things which belonged less to law and reason “ than to chance, and that they should have used constantly those proofs which were neither connected “ with innocence nor guilt ; what we now say of those “ proofs

“ proofs posterity will say of the torture, and will never
“ cease to wonder that such a kind of proof was gene-
“ rally in use, for so many centuries, in the most enlight-
“ ened part of the world.” An oath was of great weight
in the trials of the Mexicans, as we have already said :
because, as they were convinced of the terrible punish-
ments inflicted by the gods on those who perjured them-
selves, they conceived no one would dare to offend
against them ; but we do not know that this kind of
proof was permitted to the prosecutors against the ac-
cused, but only to the accused to clear himself from the
crime imputed to him.

The Mexicans punished with severity all the crimes
which are particularly repugnant to nature, or prejudi-
cial to a state, such as high treason, murder, theft, adul-
tery, incest, and other excesses of this kind ; sacrilege,
drunkenness, and lying. So far they conducted them-
selves wisely in punishing misdeeds ; but they erred in
the measure of the punishment, which in some cases was
excessive and cruel. We do not attempt to palliate the
failings of that nation, but neither can we avoid observ-
ing, that the most famous people of the old continent
have afforded such examples of error and vice in their
legislature, as make the laws of the Mexicans appear
comparatively more mild and conformable to reason.
“ The celebrated laws of the Twelve Tables are full,”
says Montesquieu, “ of the most cruel ordinations ; at-
“ tend to the punishment of fire, and other sentences,
“ which are always capital.” Yet this is that most fa-
mous compilation which the Romans made from the best
they found among the Greeks. If then the best laws
of greatly polished Greece were such, what must those
have been which were not so good ? What sort of legis-
lature

lature must those people have had whom they called barbarous? What can be more inhuman and cruel than that law of the Twelve Tables which permitted creditors to divide the body of a debtor who did not pay, and each creditor to take a portion of it in satisfaction of his debt? This law was not published in the rude beginning of that renowned city, but three hundred years after its foundation. What could be more iniquitous than that law of the famous legislator Lycurgus, which permitted theft to the Lacedemonians? The Mexicans punished this pernicious crime, but not capitally, except where the thief was unable to pay for the offence with his liberty or with his goods. But this law was not the same in cases of robbery from the fields; because, these lying more exposed to be plundered, required to be more guarded by the laws: but this very law which prescribed capital punishment against the person who robbed a certain quantity of fruit or maize, permitted necessitous travellers to eat as much as was necessary to supply present want. How much more reasonable and just was this law than that of the Twelve Tables, which condemned without distinction every person to be hanged who stole any thing from the field of another.

Lying, that pernicious crime to society, was left unpunished in most countries of the old continent, but in Japan was frequently punished with death. The Mexicans kept at an equal distance from both extremes. Their legislators, who discerned the genius and turn of the nation, perceived, that if they did not prescribe a heavy pain against lying and drunkenness, truth would be wanting at trials of justice, and faith disregarded in contracts. Experience has shewn how prejudicial impunity in those two crimes has been to those nations.

But in the midst of their severity the Mexicans were cautious not to involve the innocent in punishment with the guilty. Many laws of Europe and Asia prescribed the same punishment against those guilty of high treason, and their families. The Mexicans made the crime capital; they did not, however, deprive the relations of the traitor of life, but only of liberty; and not all of them neither, but only those who, conscious of the treason, had not made a discovery, and thereby made themselves criminal. How much more humane is this than the law of Japan. "Those laws," says Montesquieu, "by which they punish a whole family for a single crime, or a whole district; those laws which do not discriminate the innocent where there are any guilty." We do not know that the Mexicans prescribed any punishment against those who spoke ill of the government; it appears that they did not pay much regard to that liberty of speech in the subjects, which is so much feared in other countries.

Their laws concerning marriage were unquestionably more decent and becoming than those of the Romans, the Greeks, the Persians, the Egyptians, and other people of the old continent. The Tartars marry their daughters; the ancient Persians and Assyrians took their mothers to wife; the Athenians and Egyptians their sisters. In Mexico every marriage was forbid between persons connected in the first degree of consanguinity or affinity, except those between brothers and sisters-in-law, where the brother in dying left a son. That prohibition shews, that the Mexicans judged more justly of matrimony than all the above mentioned nations. That exception demonstrates their humanity of sentiments. If a widow married a second time, she had frequently

frequently the displeasure of seeing her children little beloved by a father who did not give them birth : the new husband little respected by his children, who considered him as a stranger ; and the children of each marriage as discordant among themselves, as if they were born of different mothers. What better measure could those nations have adopted, than that of marrying widows with their brothers-in-law. Many ancient nations of Europe, imitated by not a few of the modern people of Asia and Africa, bought their wives ; and, on that account, exercised over them an authority greater than the Author of nature has intended, and treated them more like slaves than companions. The Mexicans did not obtain their wives but by lawful and honourable pretensions ; and though they presented gifts to the parents, those were not given as a price for the daughter whom they courted, but merely a piece of civility to gain their good will, and dispose the parents to the contract. The Romans, although they did not scruple to lend their wives (z), had, notwithstanding, a right by law to take away their lives whenever they found them out in adultery. This iniquitous law, which made the husband judge and executioner in his own cause, instead of hindering adulteries, increased parricides. Among the Mexicans, that infamous commerce with wives was not permitted ; nor had they any authority over their lives. He who took away his wife's life, was, although he caught her in adultery, punished with death. This, they said, was to usurp the authority of the magistrates, to whom it belonged to take cognizance of crimes, and to chastise criminals according

(z) In Rome, says Montesquieu, the husband was permitted to lend his wife to another person. It is known that Cato lent his wife to Hortensius, and Cato was incapable of violating the laws of his country. Liv. xxv.

according to law. Before that law *Julia de Adulteriis* was made by Augustus, we do not know, says *Vives* (a), that a cause of adultery was ever tried in Rome; as much as to say, that that celebrated nation failed in justice in a point of this importance for seven centuries.

If, after making a comparison of the laws, we should also compare the nuptial rites of the two nations, we should find in them both a great deal of superstition; but in other respects a strong difference between them; those of the Mexicans were decent and becoming, those of the Romans indecent and reproachable.

In regard to the laws of war, it is seldom we meet with them just, among a warlike people; the great esteem of valour and military glory, creates enemies of those who are not otherwise hostile; and ambition to conquer instigates them to trespass on the limits prescribed by justice. Nevertheless, in the laws of the Mexicans, traits appear which would do honour to more cultivated nations. They never declared war until they had examined the motives for it in full council, and received the approbation of the high-priest. Besides, they generally endeavoured by embassies and messages, to those on whom war was designed, to bring about what they wished by peaceable measures, before they proceeded to a rupture. Those kinds of delay gave their enemies time to prepare themselves for defence; and besides, the justification of their conduct, contributed to make it attended with honour; as it was esteemed very base to make war on an unguarded enemy without having first challenged them, that victory might never be ascribed to any thing else than their bravery.

It

(a) L'Esprit de Loix, liv. xx. chap. 14.

It is true, that these laws were not always observed, but they were not therefore less just; and if there was any injustice in the conquests of the Mexicans, it was certainly not less in those of the Grecians, Romans, Persians, Goths, and other celebrated nations. One of the great evils attending on war is that of famine, from the waste committed by enemies on the fields. It is not possible totally to prevent this evil; but if there ever has been any thing capable of moderating it, it was certainly that usage of the Mexicans, and other nations of Anahuac, of having in every province a place appointed for the field of battle. The other custom which they had of making every fifth day, in time of war, a day of truce and repose, was not less dictated by humanity than reason.

Those nations had formed a species of *jus gentium*, by virtue of which, if the chief, the nobility, and people, rejected the propositions made them by another people, or nation, and left the decision of a point to arms; if they were conquered, the chief lost his sovereign power; the nobility, the supreme right which they had over their possessions; the common people were subjected to personal service; and all those who had been made prisoners in the heat of battle were, *quasi ex delicto*, deprived of liberty, and the right of life. This is certainly contrary to our ideas of humanity; but the general agreement of those people in such customs rendered their inhumanity less culpable, and examples much more barbarous among the most cultivated nations of the old continent, dissipate the horror which on first consideration is occasioned by the cruelty of those people of America. Among the Greeks, says Montesquieu (a), the inhabitants

(a) L'Esprit de loix. Liv. xx. ch. 14.

tants of a city taken by force of arms lost their liberty, and were sold as slaves. Certainly, the inhumanity which the Mexicans shewed to the prisoners of their enemy, is not to be compared with that which the Athenians used towards their own citizens. A law of Athens, says the same author, ordained, that whenever the city was besieged, all useless people should be put to death. We shall not find among the Mexicans, or any other polished nation of the new world, a law so barbarous as this of the most cultivated people of ancient Europe. The greatest anxiety, on the contrary, of the Mexicans, and other people of Anahuac, whenever any of their cities was besieged, was to lodge their women, children, and invalids, in a place of security, by sending them to other cities, or into the mountains. By these means, they protected the defenceless members of the community from the fury of the enemy, and prevented all unnecessary consumption of provisions.

The tribute which they paid to the king of Anahuac was exorbitant, and the laws which enforced them were tyrannical; but those laws were the effects of despotism, introduced in the last years of the Mexican monarchy; which, at its greatest height, never reached that excess of monopolizing the lands of an empire, and the property of the subjects, which we justly condemn in Asiatic monarchs; nor were there ever laws published respecting tributes so extravagant and severe as those which have been published in the old world; as for example, by the emperor Anastasius, who laid a tax even on breathing; “*Ut unusquisque pro haustu aeris pendat.*”

But if we censure the tyrannical ambition of those monarchs in the laws on tributes, we cannot at least but admire

mire and praise the refinement of those nations, and the prudence of their legislators in the laws of commerce. They had, in every city or village, a public place or square, appropriated for the traffick of every thing which could supply the necessities and pleasures of life ; where all merchants assembled for the more speedy despatch of business, which they transacted under the eyes of inspectors, or commissaries, in order that frauds might be prevented, and all disorder in contracts avoided. Every merchandize had its particular place, which preserved order and convenience to those who wished to make purchases. The tribunal of commerce, established in the same square, to determine disputes between dealers, and to punish instantaneously every offence committed there, preserved the rights of justice inviolate, and secured the public tranquillity. To these wise dispositions was owing that wonderful order, which in the midst of such an immense crowd of merchants and merchandize, raised the admiration of the first Spaniards.

Lastly, in the laws respecting slaves, the Mexicans were superior to all the most cultivated nations of ancient, and perhaps, modern Europe. If we compare the laws of the Mexicans with those of the Romans, Lacedæmonians, and other celebrated people we shall perceive in the latter a barbarity that is shocking and cruel ; in the former, the greatest humanity and respect to the laws of nature. We do not speak here of prisoners of war. What could be more humane than that law which made men born of slaves free ; which allowed a slave a property in his goods, and in whatever he acquired with his own industry and toil ; which exacted of the owner to treat his slaves like men, and not like beasts ; which gave him no authority over his life, and even deprived

prived him of the power of selling him at market, unless it was after he had, in a lawful manner, declared him intractable and incorrigible : how different were the Roman laws ? They, from the high authority granted to them by the laws, were not only owners of all the property of their slaves, but likewise of their lives, of which (*b*) they deprived them at pleasure ; treated them with the greatest inhumanity, and made them suffer the most cruel torments ; and what still shews more strongly the inhuman disposition of this nation, while they enlarged the authority of owners of slaves, they restrained whatever was in their favour. The law *Fufia Caninia*, forbid owners to free by will more than a certain number of slaves. By the *Silanian* law it was ordered, that whenever an owner was killed, all the slaves who inhabited the same house should be put to death, or in any place near where they could hear his voice. If he was killed on a journey, all the slaves who were with him, and also all those who fled, however manifest their innocence, were put to death. The *Aquilian* law made no distinction between the wound given to a slave, and that given to a beast. So far was the barbarity of the very polished Romans carried. The laws of the Lacedæmonians were not more humane, which permitted no slave to have redress at law against those who insulted or injured him.

If, in addition to what we have said hitherto, we should compare the system of education of the Mexicans with that of the Greeks, it would appear that the latter did not instruct their youth so sedulously in the arts and sciences

(*b*) It is not wonderful that the Romans granted that barbarous authority to owners over their slaves, since they granted it to fathers over their lawful children : *Endo liberis iustis jus vitæ, necis, venundandique potestas Patri.*

sciences as the Mexicans taught their children the customs of their nation. The Greeks endeavoured to inform the mind, the Mexicans to form the heart. The Athenians prostituted their youth to the most execrable obscenities in those very schools which were destined for their instruction in the arts. The Lacedæmonians tutored their children according to the prescriptions of Lycurgus, in stealing, in order to make them crafty and active, and whipped them severely when they caught them in any theft ; not for the theft, but for their want of dexterity, and being detected. But the Mexicans taught their children, together with the arts, religion, modesty, honesty, sobriety, labour, love of truth, and respect to superiors.

Thus we have given a short but true picture of the progress in refinement of the Mexicans taken from their ancient history ; from their paintings, and the accounts of the most correct Spanish historians. Thus were those people governed whom M. de Paw thinks the most savage in the world. Thus were those people governed who are inferior in industry and sagacity to the rudest people of the old continent. Thus were those people governed of whose rationality some Europeans have doubted.

CATALOGUE.

OF SOME

European and Creole AUTHORS, who have written on
the DOCTRINES of CHRISTIANITY and MORALITY,
in the LANGUAGES of New Spain.

A stands for *Augustinian*. D. for *Dominican*. F. for *Franciscan*. J. for *Jesuit*.
P. for *Secular Priest*; and (*) denotes, *that the Author printed some of his works*.

IN THE MEXICAN LANGUAGE.

- * A G. de Betancurt, F. Creole.
- Al. de Escalona, F. Span.
- Al. de Herrera, F. Spaniard.
- * Al. Molina, F. Spaniard.
- Al. Rangel, F. Spaniard.
- Al. de Truxillo, F. Creole.
- And. de Olmus, F. Spaniard.
- Ant. Davila Padilla, D. Creole.
- Ant. de Tovar Montez, P. Cr.
- Arn. Bassace F. Frenchman.
- Baldassare del Castillo, F. Sp.
- Bald. Gonzalez, J. Creole.
- Barn. Paez, A. Creole.
- Barn. Vargas, P. Creole.
- Bart. de Alba, P. Creole.
- Ben. Fernandez, D. Spaniard
- Ber. Pinelo, P. Creole.
- * Ber. de Sahagun, F. Spaniard.
- * Car de Tapia Centeno, P. Cr.
- Fil. Diez, F. Spaniard.
- Fran. Gomez, F. Spaniard.
- Fran. Ximenez, F. Spaniard.
- Garcia de Cifueros, F. Spaniard.
- Juan de la Anunciacion, A. Sp.
- Juan de Ayora, F. Spaniard.
- Juan Battista, F. Creole.
- Juan de S. Francisco, F. Span.
- Jean Focher, F. Frenchman.
- * Juan de Gaona, F. Spaniard.
- * Juan Mijangos.
- Juan de Ribas, F. Spaniard.
- Juan de Romanones, F. Sp.
- * Juan de Torquemada, F. Sp.

- Juan de Tovar, J. Creole.
- Jerom. Mendieta, F. Spaniard.
- * Jos. Perez, F. Creole.
- * Ign. de Paredes, J. Creole.
- * Louis Rodriguez, F.
- * Mart. de Leon, D. Creole.
- * Mat. Gilbert, F. Frenchman.
- Mich. Zarate, F.
- * Pierre de Gante, F. Fleming.
- Pedro de Oroz, F. Spaniard.
- * Toribio de Benavente, F. Sp.

IN THE OTOMEE LANGUAGE.

- Al. Rangel.
- Barnaba de Vargas
- * Fran. de Miranda, J. Creole.
- Gio. di Dio Castro, J. Creole.
- Orazio Carochi, J. Milanese.
- Pedro Palacios, F. Spaniard.
- Pedro de Oroz.
- Seb. Ribero, F.
- N. Sanchez, P. Creole.

IN THE TARASCAN LANGUAGE.

- * Mat. Gilbert.
- Juan Battista Lagunas, F.
- * Angelo Sierra, F. Creole.

IN THE ZAPOTECAN LANGUAGE.

- Bernardo de Albuquerque D.
- Sp. and bishop of Guajaca.
- Al. Camacho, D. Creole.
- Ant. del Pozo, D. Creole.
- Crist. Agüero, D. Creole.

IN

IN THE MIZTECAN LANGUAGE.

- Ant. González, D. Creole.
- * Ant. de los Reyes, D. Span.
- Ben Fernandez, D. Spaniard.

IN THE MAYA LANGUAGE.

- Al. de Solana, F. Spaniard.
- And. de Avendaño, F. Creole.
- Ant. de Ciudad Real, Span.
- Bern. de Valladolid, F. Span.
- Car. Mena, F. Creole.
- Jos. Dominguez, F. Creole.

IN THE TOTONACAN LANGUAGE.

- And. de Olmos.
- Ant. de Santoyo, P. Creole.
- Crist. Diaz de Anaya, P. Creole.

IN THE POPOLUCAN LANGUAGE.

Fran. Toral, F. Sp. bp. of Yucatan.

IN THE MATLAZINCAN LANGUAGE.

Andrea de Castro, F. Span.

IN THE HUAXTECAN LANGUAGE.

And. de Olmos.

* Car. de Tapia Centeno.

IN THE MIXE LANGUAGE.

* Ag. Quintana, D. Creole.

IN THE KICHE' LANGUAGE.

Bart. de Anleo, F. Creole.

Ag. de Avila, F.

IN THE CAKCICQUEL LANGUAGE.

Bart. de Anleo.

Alv. Paz, F. Creole.

Ant. Saz, F. Creole.

Ben. de Villacañas, D. Creole.

IN THE TARAUMARAN LANGUAGE.

Ag. Roa, J. Spaniard.

IN THE TEPEHUANAN LANGUAGE.

Ben. Rinaldini, G. Neapolitan.

There are many other languages as also many other writers ; but we omit mentioning any but those whose works have been printed, or at least particularly esteemed by the learned.

AUTHORS of GRAMMARS and DICTIONARIES of the above mentioned Languages.

OF THE MEXICAN.

F RAN. Ximenes, Gram. and Dict.

And. de Olmos, Gram. and Dict.

Bern. de Sahagun, Gram. and Dict.

* Al. de Molina, Gram. and Dict.

* Car. de Tapia Centeno, Gram. and Dict.

Al. Rangel, Gram.

* Ant. del Rincon, J. Cr. Gram.

* Orazio Carochi, Gram.

Bern. Mercado, J. Cr. Gram.

Ant. Davila Padilla, Gram.

* Ag. de Betancurt, Gram.

Barnaba Paez, Gram.

Ant. de Tovar Montezuma, Gram.

* Ign. de Paredes, Gram.

* Ant. de Casteln. P. Cr. Gram.

* Jos. Perez, Gram.

Gaetano de Cabrera, P. Cr. Gram.

* Ag.

* Ag. de Aldana y Guevara, P.
Cr. Gram.

Jean Focher, F. Frenchm.
Gram.

* Ant. Cortes Canal, Indian
Priest, Gram.

OF THE OTOMEE.

+ Juan Rangel, Gram.

Pedro Palacios, Gram.

Orazio Carochi, Gram.

N. Sanchez, Dict.

Seb. Ribero, Dict.

Giov. di Dio Castro, Gram. and
Dict.

OF THE TARASCAN.

— * Mat. Gilbert, Gram. and Dict.

* Ang. Sierra, Gram. and Dict.
Juan Battistade Lagunas, Gram.

OF THE ZAPOTECAN.

Ant. del Pozo, Gram.

Crist. Agüero, Dict.

OF THE MIZTECAN.

Ant. de los Reyes, Gram.

OF THE MAYA.

And. de Avendaño, Gram. and
Dict.

Ant. de Ciudad Real, Dict.

Louis de Villanpando, Gram.
and Dict.

* Pedro Beltran, F. Cr. Gram.

OF THE TOTONACAN.

And. de Olmos, Gram. and Dict.

Crist. Diaz de Anaya, Gram. —
and Dict.

OF THE POPOLUCAN.

Franc. Toral, Gram. and Dict.

OF THE MATLAZINCAN.

And. de Castro, Gram. and Dict.

OF THE HUAXTECAN.

And. de Olmos, Gram. and
Dict.

Car. de Tapia, Gram. and Dict.

OF THE MIXE.

* Ag. Quintana, Gram. and
Dict.

OF THE CAKCIQUEL.

Ben. de Villacañas, Gram. and
Dict.

OF THE TARAUMARAN.

Jerom Figueroa, J. Cr. Gram. —
and Dict.

Ag. de Roa, Gram.

OF THE TEPEHUANAN.

Jerom Figueroa, Gram. & Dict.

Tom. de Guadalajara, J. Cr.
Gram.

Ben. Rinaldini, Gram. *26*

DISSERTATION

DISSERTATION VII.

Of the Boundaries and Population of the Kingdoms of Anahuac.

THE mistakes of many Spanish authors concerning the boundaries of the Mexican empire, and the romantic notions of M. de Paw, and other foreign authors, respecting the population of those countries, have compelled us to engage in this Dissertation to ascertain the truth ; which we shall do as briefly as possible.

S E C T. I.

Of the Boundaries of the Kingdoms of Anahuac.

SOLIS, following several ill-informed Spanish authors, affirms that the Mexican empire extended from the isthmus of Panama to the cape of Mendocina in California ; Tournon, a French Dominican, desirous, in his General History of America, of enlarging those boundaries, says, that all the discovered countries in North America, were subject to the king of Mexico ; that the extent of that empire, from east to west, was 500 leagues, and from north to south 200, or 250 leagues : that its boundaries were on the north, the Atlantic ocean ; in the west, the gulf of Anian ; in the south, the Pacific Ocean ; and in the east, the isthmus of Panama ; but besides the geographical errors of this description, there is also a contradiction in it ; because, if it ever were true, that that empire extended from the isthmus of Panama to the gulf or strait of Anian, the extent of it would not be only 500, but 1000 leagues,

leagues, as it would not comprehend less than 50 degrees.

The origin of this error is, that those authors were persuaded that there was no other sovereign in Anahuac, but that of Mexico: that the kings of Acolhuacan and Tlacopan were his subjects, and that the Michuacanese and Tlascalans, also depending on that crown, had latterly rebelled. But none of those states ever belonged to the kingdom of Mexico. This appears evident from the testimony of all the Indian historians, and all the Spanish writers who received their information from them; namely, Motolinia Sahagun, and Torquemada. The king of Acolhuacan had always been the ally of Mexico, from the year 1424, but was never the subject. It is true, that when the Spaniards arrived there, the king Cacamatzin appeared to depend on his uncle Montezuma; because, on account of the rebellious spirit of his brother Ixtlilxochitl he required the protection of the Mexicans. The Spaniards afterwards saw Cacamatzin come as ambassador from the king of Mexico, and serve him likewise in other capacities. They saw him also led prisoner to Mexico, by order of Montezuma. All this renders the errors of the Spaniards, in great measure, very excusable; but it is certain, that those demonstrations of services towards Montezuma were not those of a vassal to his king, but those of a nephew to his uncle; and that Montezuma, in ordering him to be taken to please the Spaniards, arrogated to himself an authority which did not belong to him, and did that king a heavy injury, of which he afterwards repented. As to the king of Tlacopan, it is true, that he was created a sovereign by the king of Mexico, but he had absolute and supreme dominion over his states, on the single condition

dition of being the perpetual ally of the Mexicans, and of giving them assistance with his troops whenever it was necessary. The king of Michuacan, and the republic of Tlascala, were always rivals and professed enemies of the Mexicans, and there is no memory that either the one or the other was ever subject to the crown of Mexico.

The same thing might be said of many other countries which the Spanish historians believed to be provinces of the Mexican empire. How was it possible that a nation, which was reduced to a single city, under the dominion of the Tepanecas, should, in less than a century, subdue so many people as were between the isthmus of Panama and California? What the Mexicans really did, though far less than the above mentioned authors report, was truly surprising, and would not be credible, if the rapidity of their conquests had not been confirmed by incontestible proof. Neither in the narratives of the Indian historians, nor in the enumeration of the states conquered by the kings of Mexico, which is found in the collection of Mendoza, nor in the register of the tributary cities explained in that collection, can we find any foundation for assenting to that arbitrary enlargement of the Mexican dominions; but, on the contrary, it is entirely contradicted by Bernal Diaz. He, in the xciii^d chapter of his history says, “the great Montezuma had
“several garrisons and people of war on the frontiers of
“his states. He had one in Soconusco, to defend himself on the side of Guatemala and Chiapa; another to
“defend himself from the Panuchese, between Tuzapan
“and that place, which we call *Almeria*; another in
“Coatzacualco, and another in Michuacan (c).”

We

(c) What we have to say of the boundaries of the kingdoms of Anahuac will be better understood by consulting our charts.

We are certain, therefore, in the first place, that the Mexican dominions did not extend in the south beyond Xoconochco, and that none of all the provinces which at present are comprehended in the dioceses of Guatemala, Nicaragua, and Honduras, belonged to the Mexican empire. In our ivth book we have said, that *Tliltototl*, a celebrated Mexican general, in the last years of king Ahuitzotl, carried his victorious arms as far as Guatemala; but there we also add, that it is not known that that country remained subject to the crown of Mexico; the contrary appears rather from history to be the truth. Torquemada, in book ii. c. 81. makes mention of the conquest of Nicaragua by the Mexicans, but what he affirms there of an army of the Mexicans in the time of Montezuma, is in book iii. c. 10. attributed by him to a colony which had gone out many years before, by order of the gods, from the neighbourhood of Xoconochco; wherefore his account is not to be depended upon.

Bernal Diaz, in chap. clxvi. expressly affirms, that the Chiapanese were never subdued by the Mexicans; but this is not to be understood of their whole country, but of a part only; because we know from Remezal, Chronicler of that province, that the Mexicans had a garrison in Tzinacantla; and it is certain from the tribute list, that Tochlan, and other cities of that country, were tributaries of the Mexicans.

In the north, the Mexicans did not advance farther than Tuzapan, as we are told in the last quoted passage of Diaz; and we know for certain, that the Panuchese were never subjected to them. In the east, we have already fixed their boundaries at the river Coatzacualco. Diaz says, that the country of Coatzacualco was not a province of Mexico; on the other hand we find, among
the

the tributary cities of that crown, Tochtlan, Michapan, and other places of that province. We are, however persuaded, that the Mexicans possessed all that was to the west of the river Coatzacualco, but not that which was to the east of it; and that this river was their boundary in that quarter. Towards the north, their possessions were bounded by the country of the Huastecas, who were never subdued by the Mexicans. Towards the north-west, the empire did not extend beyond the province of Tulba; all that great tract of land which was beyond this province, was occupied by the barbarous Otomies and Chechemecas, who had no society, nor obeyed any sovereign. In the west it is known that the empire terminated at Tlaximalojan, the frontier of the kingdom of Michuacan; but on the sea-coast it extended as far as the western extremity of the province of Coliman, and no farther. In the catalogue of the tributary cities, Coliman, and other places of that province appear, but none that are beyond it: nor are they mentioned in the history of Mexico. The Mexicans had nothing to do with California, nor could they expect any advantage from the conquest of a country so distant, so unpeopled, and miserable. If that dry and rocky peninsula had ever been a province of the Mexican empire, some population would have been found there; but it is certain, that there was not a single house met with upon it, nor the least remains or traces of inhabitants. Lastly, in the south, the Mexicans had made themselves masters of all those great states, which were between the Vale of Mexico and the Pacific Ocean. The greatest length of their dominions was on the sea coast from Xoconochco to Coliman.

Dr. Robertson says, that the territories belonging to the chiefs of Tezcucó and Tacuba, scarcely yielded in extent to those of the sovereign of Mexico (*d*). But this is very far from being true, and contrary also to what all the historians of Mexico say. The kingdom of Tezcucó, or Acolhuacan, was bounded on the west partly by the lake of Tezcucó, partly by Tzompanco, and other Mexican states; and in the east, by the dominions of Tlascala; so that it could not extend from west to east, above sixty miles; on the south it was bounded by the state of Chalco, belonging to Mexico; and in the north by the independent state of the Huastecas. From the frontier of this country to that of Chalco, the distance is about two hundred miles, which is the whole extent of the kingdom of Acolhuacan, but does not make one eighth part of that of the Mexican dominions. The states of the petty king of Tlacopan, or Tacuba, were so small, that they did not merit the name of a kingdom; for from the Mexican lake in the east, to the frontier of the kingdom of Michuacan in the west, the extent was not more than eighty miles; nor from the valley of Toloacan in the south, to the country of the Otomies in the north, more than fifty. The comparison therefore made by Robertson, of the dominions of Acolhuacan and Tacuba, with those of Mexico, is erroneous.

The republic of Tlascala, surrounded by the Mexican and Tezcucan dominions, and by the states of Cholula and Huexotzinco, was so confined, that from east to west it had scarcely fifty, and from south to north not
above

(*d*) There were three places of the name of *Tochtlan*, (called by the Spaniards *Tuſtla*), the first in the province of Chiapa, the second in Xoconochco, or Soconusco, and the third in Coatzacoalco.

above thirty miles of extent. We have met with no author who gives a greater latitude to this state except Cortes, who says, that the dominions of this republic were ninety leagues in circumference; but this is a manifest error.

With respect to the kingdom of Michuacan, no one, as far as we know, has mentioned all its ancient boundaries except Boturini. This author says, that the extent of that kingdom, from the valley of Ixtlahuacan, near Tolloccan, to the Pacific Ocean, was five hundred leagues; and from Zacatollan to Xichu, one hundred and sixty leagues; and that in the dominions of Michuacan, were comprehended the provinces of Zacatollan, Coliman, and that province which the Spaniards called *Provencia d' Avalos*, situate to the north-west of Coliman. But this author was wholly deceived in his account; for it is certainly known, that the kingdom of Michuacan had not its boundaries in Ixtlahuacan, but Tlaximaloan, where the Mexican dominions reached. We know from the list of tributes, that the maritime provinces of Zacatollan and Coliman, belonged to Mexico. Lastly, the Michuacanese could not extend their dominions as far as Xichu, without subduing the barbarous Chechemecas, who occupied that quarter; but we know that the last were not subdued till many years after the conquest by the Spaniards. The kingdom of Michuacan, therefore, was not so large as Boturini believed it; its extent did not comprehend more than three degrees of longitude, and about two of latitude.

What we have said hitherto, tends to shew the exactness of our description, and of our geographical charts with respect to the boundaries of those kingdoms, founded on the history of them, the register of the tributes, and the testimony of the ancient writers.

SECT.

S E C T. II.

On the Population of Anahuac.

WE do not propose here to treat of the population of all America ; that would be too large a subject and foreign to our purpose ; but solely of that of Mexico which belongs to this history. There were and there are in America, many populous countries, and there are also vast deserts ; and they are not less distant from the truth who imagine the countries of the new world as populous as those of China, than they who believed them as unpeopled as those of Africa. The calculation of P. Riccioli is as uncertain as those of Sufimilch and M. de Paw. Riccioli gives three hundred millions of inhabitants to America. The political arithmeticians, say M. de Paw, do not reckon more than one hundred millions. Sufimilch, in one part of his work, computes them at one hundred, and in another at one hundred and fifty millions. M. de Paw, who mentions all these calculations, says, there are not of real Americans more than from thirty to forty millions. But we must repeat, that all those calculations are most uncertain as they are not founded on any proper grounds ; for if we do not know hitherto the population of those countries in which the Europeans have established themselves, such as those of Guatemala, Peru, Quito, Terra Firma, Chili, who is capable of guessing the number of inhabitants of the numerous countries little or not at all known to the Europeans, such as those which are to the north and north-west of Coahuila, New Mexico, California, and the river *Colorado*, or Red River, in North-America? Who can number the inhabitants of the new world,

world, while he does not know the number of provinces and nations which it contains? Leaving aside therefore such calculations which cannot be undertaken with the least degree of certainty, we shall content ourselves with examining what M. de Paw and Dr. Robertson say on the population of Mexico.

“ The population of Mexico and Peru,” says M. de Paw, “ has undoubtedly been exaggerated by the Spanish writers, who are used to represent objects with immoderate proportions. Three years after the conquest of Mexico, the Spaniards had occasion to bring some people from the Lucayos, and afterwards from the coast of Africa, to people the kingdom of Mexico. If this monarchy contained in 1518, thirty millions of inhabitants, why in 1521 was it depopulated?” We shall never deny, that among the Spanish writers there are many addicted to exaggerating, as there are also among the Prussians, the French, the English, and other people; because the immoderate desire to magnify things which they describe is a passion common to all nations in the world, from which M. de Paw himself is not free, as he demonstrates through the whole of his work: but to censure all the Spaniards together is an indiscriminate charge most injurious to that nation, which, like every other, has a mixture of good and bad in it. After having read, at least, the best historians of the cultivated nations of Europe, we have not found two who appear comparable as to sincerity with the two Spaniards Mariana and Acosta, who are highly esteemed therefore, and extolled by all writers. Among the ancient historians of Mexico, there have been some, such as Acosta, Diaz, and Cortes himself, of whose sincerity of relation there is no doubt.

But

But although each of these authors had not been possessed of those qualities which are required to merit our belief, nevertheless, the uniformity of their testimonies would be an undeniable proof of the fidelity of their accounts. Authors of little veracity disagree among themselves, except when they copy each other; but this does not happen to those historians, who, intent only on relating what they have themselves seen, or found probable from information, did not regard what others had written; on the contrary, it appears from their works, that at the time they were writing, they had not the writings of others under their eyes. M. de Paw himself (*f*), speaking in one of his letters of that rite of the Mexicans of consecrating and eating the statue of paste of *Huitzilopochtli*, by him called *Vitzilipultzi*, and of the rite among the Peruvians at their festival *Capac-raime*, writes thus to his correspondent: "I confess to you, that the unanimous testimony of the Spanish writers does not allow us to doubt of it." If the consent then of the Spanish historians, concerning what they did not see, does not allow us to doubt of it, how should he doubt of that which they depose as eye-witnesses?

Let us enquire therefore what the ancient Spanish writers say of the population of America. All agree in affirming, that those countries were well peopled, that there were very many large cities, and an infinite number of villages and hamlets; that many thousands of merchants assembled at the markets of populous cities: that they mustered most numerous armies, &c. Cortes, in his letters, and the anonymous conqueror,
Alfonso

Alfonso de Ojeda, and Alfonso de Mata, in their memoirs, Las Casas, in his work entitled, the *Destruction of the Indies* ; B. Diaz, in his history, Motolinia, Sahagun, and Mendieta, in their writings ; all eye-witnesses of the ancient population of America : Herrera, Gomara, Acosta, Torquemada, and Martinez, are all of the same opinion with respect to the great population of those countries. M. de Paw cannot produce a single ancient author who does not confirm it by his testimony ; whereas, we can cite several authors who do not make any mention of that superstitious rite of the Mexicans, namely, Cortes, Diaz, and the anonymous conqueror, the three most ancient Spanish writers on Mexico. Notwithstanding M. de Paw affirms, that we cannot doubt of such a rite, because of the unanimous testimony of the Spaniards ; who then would doubt of the great population of Mexico, or rather deny it so strongly against the uniform depositions of all the ancient historians ? But if the population of Mexico was so great in 1518, why in 1521 was it necessary to bring people there from the Lucayos, and afterwards from the coast of Africa, to people it ? We confess ingenuously we cannot read this objection of M. de Paw, without being extremely offended at his affirming with such hardness, that which is directly false, and contrary to the accounts of authors. Where has M. de Paw read that it was necessary to transport people from the Lucayos to people Mexico ? We defy him to produce a single author who says so ; we know rather the contrary from many writers. We know from Herrera and others, that from 1493, when the Spaniards established themselves in Dominica, to 1496, the third part of the inhabitants of that large island perished in war, and through other distresses.

In

In 1507, there did not remain more than the tenth part of the Indians which were in 1493, according to Las Casas, an eye-witness; and from that time the population of that island diminished to such a degree, that in 1540, there hardly remained two hundred Indians; on which account, from the beginning of the fifteenth century, the Spaniards began to transport thousands of Indians from the Luyacos, to recruit the population of Hispaniola; but those having likewise died, they began before the conquest of Mexico to carry people from Terra Firma, and other countries of the continent of America, according as they discovered them. It is known from a letter written to the council of the Indies by the first bishop of Mexico, sent by Las Casas to the emperor Charles V. that the cruel governor of Panuco, Nugno Guzman, sent from thence twenty-eight vessels loaded with Indian slaves to be sold in the islands: so that it is far from being true, that the Spaniards carried people from the islands to inhabit the continent of North-America; that on the contrary they carried people from the continent to inhabit the isles, which the above authors expressly relate. It is true, that after the conquest of Mexico, slaves were imported there from Africa; not because there was any want of people; but because the Spaniards required them to serve in the making of sugar, and to work in mines, to which they could not compel the Americans, on account of the laws then recently published: it is therefore false, and contrary to the deposition of those above mentioned authors, that Mexico was depopulated three years after the conquest, or that it was necessary to bring people there from the Lucayos and Africa to recruit its inhabitants. We are rather certain, that some colonies were sent a few years after

after the conquest, from the countries subject to the king of Mexico, and the republic of Tlascala, to people other lands, namely, Zacatecas, Suis, Potosi, Saltillo, &c. &c.

But let us see what those ancient writers say in particular of the population of Mexico. We do not know that any of them has had the boldness to express the number of the inhabitants of Mexico; whether it did or did not contain thirty millions, could have been known from the kings of Mexico and their ministers; and although the Spaniards might have informed themselves from them of this particular, we do not find that any one of them has done so. That which several of them affirm is, that among the feudatories of the king of Mexico were thirty who had each about an hundred thousand subjects, and other three thousand lords who had a smaller number of vassals. Laurentius Surius affirms (*f*) that this is certain from records which were in the royal archives of the emperor Charles V. Cortes, in his first letter to that emperor, speaks thus: "The multitude of inhabitants in those countries is so great, that there is not a foot of soil left uncultivated: but notwithstanding there are many who, for want of bread, go begging through the streets and markets." B. Diaz, the anonymous conqueror, Motolinia, and other eye-witnesses, give us similar ideas of the population of Mexico. To come to the particular countries of Anahuac, we are certain, from the depositions of the above mentioned, and almost all the ancient authors, of the great population of the Mexican vale, of the countries of the Otomies, of the Matlatzincas, Tlahuicas, Co-

VOL. III. 3 D huixcas,

(*f*) Surius in Commentario brevi rerum in orbe gestarum ab anno 1500 ad 1568.

huixcas, Miztēcas, Zapotecas, and Cuitlatecas; of the province of Coatzacualco; of the kingdoms of Acolhuacan, and Michuacan, and the states of Tlascala, Cholula, Huexotzinco, &c.

The vale of Mexico, although that a great part of it was occupied by the lakes, was at least as well peopled as the most populous country of Europe. It contained forty considerable cities, which we have already named, and are mentioned likewise by the ancient writers. The other inhabited places of it were innumerable, the names of which we could also give, if we were not afraid of tiring our readers. The very sincere B. Diaz, describing, in chap. viii. of his History, what he saw in his way through the vale towards the capital, speaks thus :
“ When we beheld things so wonderful we knew not
“ what to say, nor whether the objects before our eyes
“ were real; we saw so many great cities situated on
“ the main land, and many others in the lake, and an
“ infinity of little vessels upon it.” He says farther, that some soldiers, his companions, in wonder beyond measure at seeing so great and beautiful a territory, were in doubt whether what they saw was the effect of a dream, or enchantment. Those and many other candid confessions of Diaz are sufficient to answer Robertson, who availed himself of certain words of that author, which he did not well comprehend, to make his readers believe that the population of Mexico was not so great as it certainly was.

Concerning the population of the ancient capital there are various opinions; nor can the case be otherwise where an attempt is made to judge of the populousness of a great city by the eye: but all the writers who saw it, or were informed by eye-witnesses, are agreed in saying

ing that it was very great. Herrera says it was twice as large as Milan. Cortes affirms that it was as large as Seville and Cordova; Surius citing certain records which were in the royal archives of Charles V. says, that the population of Mexico amounted to an hundred and thirty thousand houses. Torquemada, following Sahagun and other Indian historians, reckons an hundred and twenty thousand houses; and adds, that in each house were from four to ten inhabitants. The anonymous conqueror speaks thus of it: "this city of Temistitan may be about two leagues and a half or near three leagues, more or less, in circumference; the greater part of those who have seen it judge that there are upwards of sixty thousand fires in it, and rather more than less." This calculation, adopted by Gomara and Herrera, appears to us to come nearest the truth, considering the extent of the city, and the manner of dwelling of those people.

But the whole of this is contradicted by M. de Paw. He calls the description excessive and exaggerated, which is given of this city of America; "which contained, according to some authors, seventy thousand houses in the time of Montezuma II. so that at that time it must have had three hundred and fifty thousand inhabitants; whereas it is notorious, that the city of Mexico, considerably increased under the dominion of the Spaniards, has not at present above sixty thousand inhabitants, including twenty thousand negroes and mulattoes." This is another passage of the *Recherches Philosophiques* which will make the Mexicans smile. But who can avoid smiling when they see a Prussian philosopher, so bent on diminishing the populousness of that American city, and angry at those who represent it great-

er than he wishes it? Who will not be surpris'd to hear that the number of the inhabitants of Mexico is notorious in Berlin, when it is not many years since it has been known to the ecclesiastics, who every year make an enumeration; we shall therefore give M. de Paw some certain information concerning that city of America, that he may in future avoid those errors into which he has fallen in speaking of its populousness.

Mexico, he must know, is the most populous city of all those which the catholic King has in his vast dominions. From the bills of mortality published daily in the cities of Madrid and Mexico, it appears that the number of the inhabitants of Madrid is a fourth less than that of Mexico; for example, if Madrid has a hundred and sixty thousand inhabitants, Mexico has without doubt two hundred thousand. There has been a great difference of opinions respecting the number of souls of the modern city of Mexico, as there was also respecting the ancient city, and all other cities of the first rank; but there being an enumeration made with great accuracy of late years, partly by the priests, and partly by the magistrates, it has been found that the inhabitants of that capital exceeded two hundred thousand, although they have not ascertained how much more. We may form some idea of its populousness from the quantity of *pulque* (g) and tobacco which is daily consumed there (b). Every day are brought into it upwards of six thousand *arrobas* of pulque, that is a hundred and ninety thousand
Roman

(g) *Pulque* is the usual wine, or rather beer, of the Mexicans, made of the fermented juice of the Maguei. This liquor will not keep above one day, and therefore what is made is daily consumed.

(b) Our account of the daily consumption of *pulque* and tobacco in Mexico is taken from the letter of one of the chief accountants of that custom-house, of the 23d of February, 1775.

Roman pounds ; in the year 1774, there were two millions, two hundred and fourteen thousand two hundred and ninety-four and an half *arrobas* entered, that is more than seventy-three millions of Roman pounds ; but in this computation we do not comprehend what is introduced by smuggling, nor that which the Indians who are privileged, sell in the principal square of the city. This amazing quantity of pulque is almost solely consumed by the Indians and Mulattoes, the number of which is surpassed by that of the Whites and Creoles, few of whom make use of this beverage. The tax upon it amounts annually, in the capital alone, to about two hundred and eighty thousand crowns (pesos fuertes). The daily consumption of tobacco for smoking, in that capital, is reckoned at one thousand two hundred and fifty crowns, or thereabouts ; which in one year makes the sum of four hundred and fifty thousand crowns and more. But it is necessary to be understood, that among the Indians very few use tobacco ; among the Europeans and Creoles very many do not use it, and some of the Mulattoes do not. Who will put greater faith in the calculations made by M. de Paw than in the registers of the capital ? or who will place more value on the judgment of a modern Prussian, who is so extravagant respecting the ancient populousness of that city, than on that of so many ancient writers who saw it ?

With regard to the city and court of Tezcuco, we know from the letters of Cortes to Charles V. that it contained about thirty thousand houses ; but this ought to be understood solely of the court ; for including the other three cities of Coatlican, Huexotla, and Atenco, which, as Cortes attests, appeared to form a separate population, it was, by a great deal, larger than Mexico.

Torquemada,

Torquemada, following Sahagun, and the accounts of the Indians, affirms, that the population of those four cities, contained an hundred and forty thousand houses ; from which number, although we deduct an half, a considerable population would remain. No historian has told us the population of Tlacopan, although all affirm it was considerable. Of Xochimilco we know, that next to the three royal residences it was the largest of all. Of Iztapalapan, Cortes affirms, it had from twelve to fifteen thousand fires ; of Mixcoac, he says, that it had about six thousand ; Huitzilopochco from four to five thousand ; Acolman and Otompan each four thousand ; and Mexicaltzinco, three thousand. Chalco, Azcapotzalco, Cojoacan, Quauhtitlan, were, without comparison, larger than these last mentioned cities. All these, and a great many others, were comprehended in the vale of Mexico alone : the sight of which caused no less admiration than fear to the Spaniards when they first observed them from the tops of the mountains of that delightful valley. They felt the same astonishment when they saw the population of Tlascala. Cortes, in his letter to Charles V. speaks thus of that city ; “ It is so large
“ and wonderful, that although I omit a great deal of
“ what I could say, I believe that little which I say will
“ appear incredible ; for it is much larger and more po-
“ pulous than Granada when it was taken from the
“ Moors, more strong, has as good buildings, and more
“ abundance of every thing.”

The anonymous conqueror speaks of it in the same manner, “ There are,” he says, “ great cities, and
“ among others that of Tlascala, which in some respects,
“ resembles Granada, and in others, Segovia, but it
“ is more populous than either.” Of Tzimpantzinco, a
city

city of the republic, Cortes affirms (*i*), that the enumeration of the houses having been made at his desire, there were found to be twenty thousand. Of Huejotlipan, a place of the same republic, he says, that it had from three to four thousand fires. Of Cholula Cortes affirms, that it had about twenty thousand houses, and as many in the neighbouring villages, which were like its suburbs. Huexotzinco and Tepeyacac were the rivals of Cholula in greatness. These are some of the peopled places which the Spaniards saw before the conquest; we omit many others, of the greatness of which we are certified by the testimony of these and other authors.

We are not less convinced of the population of those countries from the innumerable concourse of people which were seen at their markets, from the very numerous armies which they raised whenever it was necessary, and the surprising number of baptisms immediately after the conquest. With respect to the numbers at their markets, and of their armies, we have said enough in our history on the faith of many eye-witnesses. We might suspect, that the conquerors had exaggerated the number of the Indian troops, in order to make their conquest appear more glorious, but this would appear only when they reckoned the number of the troops of the enemy, not when they counted their own allies, as the more the number of the latter was increased, their conquests became the less difficult and glorious. The conqueror Ojeda, however, numbered an hundred and fifty thousand men among the allied troops of Tlascala, Cholula, Tepeyacac, and Huexotzinco, in the review which was made of them in Tlascala as they were going to the siege of Mexico. Cortes himself affirms, that the allied troops
who

(*i*) Cortes speaks of this city without naming it, but it appears from the context to have been the same; and Torquemada mentions it expressly.

who accompanied him to the war of Quauhquechollan exceeded an hundred thousand, and that those who assisted him in besieging the capital, exceeded considerably two hundred thousand in number. On the other hand, the besieged were so numerous, that although an hundred and fifty thousand died during the siege, as we have already said, when the capital was taken by the Spaniards, and it was ordered that all the Mexicans should leave it, for three successive days and nights the streets and roads were filled with people who were leaving the city to take refuge in other places, according to the testimony of B. Diaz, an eye-witness. With respect to the number of baptisms, we are assured, by the testimony of the religious missionaries themselves, who were employed in the conversion of those people, that the children and grown persons baptised by the Franciscan (*k*) fathers alone, from the year 1524 to the year 1540, were upwards of six millions in number; who were, for the most part, inhabitants of the vale of Mexico and the circumjacent provinces. In this number are not comprehended those who were baptised by the priests, Dominicans, and Augustinians, amongst whom, and the Franciscans, were divided those most abundant harvests; and besides, it is certain that the Indians were innumerable who remained obstinate in their paganism, or did not receive the Christian faith till many years after the conquest. We know also, from the noisy controversies excited there by some religious, and reported to the pope Paul III. that on account of the extraordinary and before unseen multitude of catechumens, the missionaries were obliged to omit some ceremonies of the baptism, and amongst others

(*k*) Motolinia, one of the religious missionaries, baptised more than four hundred thousand Indians; an account of which he left in writing.

others the use of their spittle, because, from doing it so much they dried up and almost excoriated their mouths, their tongues, and their throats.

From the discovery of Mexico till now the number of the Indians has been gradually diminishing. Besides the many thousands which perished by the first contagion of the small-pox, carried there in 1520, and in the war of the Spaniards, in the epidemic of 1545 eighty thousand perished, and in that of 1576 upwards of two millions, in the dioceses alone of Mexico, Angelopoli, Michuacan, and Guaxaca, which is known by the bills of mortality presented by every curate to the viceroy. Notwithstanding Herrera, who wrote towards the end of the sixteenth century, reports, on the faith of authentic documents sent him by the viceroy of Mexico, that in the dioceses alone of Mexico, Angelopoli, and Guaxaca, and in those provinces of the dioceses of Mexico which were circumjacent to the capital, there were, at that time, six hundred and fifty-five principal settlements of Indians, and innumerable other smaller ones dependent upon them; in which were contained ninety thousand Indian families of tributaries. But it is necessary to be known, in those are not included the nobles, nor the Tlascalans, and other Indians who assisted the Spaniards in the conquest; for in respect to their birth, or the services which they rendered the conquerors, they were exempted from tributes. Herrera, who was well informed on this subject, affirms, that in those times, four thousand Spanish families, and thirty thousand Indian houses were counted in the capital. From that time the number of Indians has gradually been diminishing, and the number of the whites or Spaniards has been increasing.

M. de Paw will answer according to his style, that all

the proofs which we have adduced to demonstrate the population of Mexico, are of no weight, for they are obtained from foldiers who were rude and illiterate, or from ignorant and superstitious ecclesiastics ; but if this was the character of all the writers we have quoted, their testimony would be still of great force because of their uniformity. Who can believe that Cortes, and the other officers who subscribed his letters, should deceive their king, where they could have been so easily detected by hundreds of witnesses, and not a few enemies ; is it possible that so many Spanish and Indian writers should all agree to exaggerate the population of those countries, and not one amongst them shew some respect for posterity ? Of the veracity of the first missionaries there can be no doubt. They were men of exemplary life, and much learning, selected from amongst many to promulgate the gospel in the new world. Some of them had been professors in the most celebrated universities of Europe ; had obtained the first rank in their orders, and merited the favour and confidence of the emperor Charles V. Those honours which they resigned in Europe, and those which they never received in America, clearly demonstrated their disinterested zeal ; their voluntary and rigid poverty, their continual treaty with the great Being of nature, their incredible fatigues in so many long and difficult journeys on foot, without provisions, in laborious service, and still more their excessive charity, mildness, and compassion, towards those afflicted nations, will make their memory ever venerated in that kingdom. In the writings of those immortal men, so many characters of sincerity are discovered, that we are not permitted to entertain the least doubt of their accounts. It is true, they committed a heavy sin, in the judgment of M. de Paw,

Paw, in burning the greater part of the historical paintings of the Mexicans, because they thought them full of superstition. We valued still more than M. de Paw those paintings, and lament their loss; but we neither despise the authors of that unfortunate burning, nor curse their memory; because the evil which their intemperate and heedless zeal made them commit is not to be compared with the good which they did; besides, they endeavoured to repair the loss by their works, particularly Motolinia, Sahagun, Olmos, and Torquemada.

M. de Paw has gone so far to lessen the population of those countries, that he has dared to affirm (who could believe it) in a decisive magisterial tone, that in all those regions there was no city but Mexico. Let us attend to him purely for amusement. "So that as there are not," he says, "the least vestiges of the Indian cities in all the kingdom of Mexico, it is manifest that there was no more than one place which had any appearance of a city, and this was Mexico, which the Spanish writers would call the Babylon of the Indies, but it is now a long time since they have been able to deceive us with the magnificent names they gave to the miserable hamlets of America."

But all the authors who have written on Mexico unanimously affirm, that all the nations of that vast empire lived in societies; that they had many well-peopled, large, well-laid out settlements; name the cities which they saw; and they who travelled through those regions two centuries and a half after the conquest, saw the same settlements in the places mentioned by those writers; so that M. de Paw is either persuaded that those writers prophetically announced the future population of those places, or he must confess that they have been from that time where they are at present. It is true that the
Spaniards

Spaniards founded many settlements, such as the cities of Angelopoli, Guadalajara, Valadolid, and Veracruz, Zelaja, Potosi, Cordova, Leone, &c. but the settlements made by them in the districts of the Mexican empire with respect to those made by the Indians are as one to a thousand. The Mexican names given to those settlements are still preserved to this day, and demonstrate that the original founders of them were not Spaniards but Indians. That those places of which we have made frequent mention in this history were not miserable villages, but cities, and large well formed settlements, such as those of Europe, is certified by the united testimony of all writers who saw them.

M. de Paw is desirous of being shewn the vestiges of these ancient cities; but we could shew him more than that, the ancient cities now existing. However, if he chooses to see traces of them he may go to Tezcuco, Otumba, Tlascala, Cholula, Huexotzinco, Chempoalla, Tulla, &c. where he will find so many that he will have no doubt of the ancient greatness of those American cities.

This great number of towns and inhabited places, although so many thousands perished annually in the sacrifices and continual wars of those nations, gives us clearly to understand the vast population of the Mexican empire, and the other countries of Anahuac; but if all this which we have said is not sufficient to convince M. de Paw, in charity, we advise him to enter into an hospital.

What we have applied against M. de Paw may serve likewise to refute Dr. Robertson, who, seeing so many eye-witnesses contrary to him in opinion, recurs to a subterfuge similar to that of the warmth of the imagination which he made use of to deny faith to the Spanish his-

torians respecting what they said of the excellence of the Mexican labours of cast metal. Treating of the wonder which the sight of the cities of Mexico caused to the Spaniards in his seventh book, he says, "In the first fervour of their imagination they compared Chempoalla, though a town only of the second or third size, to the cities of greatest note in their own country. When afterwards they visited in succession Tlascala, Cholula, Tacuba, Tescuco, and Mexico itself, their amazement was so great that it led them to convey ideas of their magnitude and populousness bordering on what is incredible . . . For this reason some considerable abatement ought to be made from their calculation of the number of inhabitants in the Mexican cities ; and we may fix the standard of their population much lower than they have done."

Thus Robertson commands, but we are not disposed to obey him. If the Spaniards had written their histories, letters, or relations *in the first fervour of their admiration*, we might then justly suspect that stupefaction had led them to exaggerate ; but it was not so ; for Cortes, the most ancient of those writers, did not write his first letter to Charles V. till a year and an half after his arrival in that country ; the anonymous conqueror wrote some years after the conquest ; B. Diaz, after forty years continual residence in those countries, and the others in like manner. Is it possible that this *fervour of their admiration* should endure for one, twenty, and even forty years afterwards ? But whence arose such wonder in them ? Let us hear it from Dr. Robertson himself. "The Spaniards, accustomed to this mode of habitation among all the Indians with which they were then acquainted, were astonished, on entering New Spain, to find the natives residing in towns of such extent as resembled

“resembled those of Europe.” But Cortes and his companions, before they went to Mexico, knew very well that those people were not savage tribes, and that their houses were not huts; they had heard from those who, a year before, had made the same voyage with Grijalva, that there were beautiful settlements there, consisting of houses of stone and lime, with high towers to them; as Bernal Diaz attests, who was an eye-witness. That, therefore, was not the occasion of their wonder, but it was the real largeness and multitude of the cities which they saw. “It is not surprising then,” adds Robertson, “that Cortes and his companions, little accustomed to such computations, and powerfully tempted to magnify, in order to exalt the merit of their own discoveries and conquests, should have been betrayed into this common error, and have raised their descriptions considerably above truth.” But Cortes was not so weak, and saw very well that the exaggeration of the number of his allies, far from raising the merit, served rather to diminish the glory of his conquests. He often confesses that he was assisted in the siege by eighty, and sometimes an hundred, and two hundred thousand men; and as those ingenuous confessions discover his sincerity, in the same manner those numerous armies demonstrate the population of those countries. Besides, Dr. Robertson supposes, when the Spanish writers wrote concerning the number of the houses of the Mexican cities, it was only expressed by conjecture, and the judgment which they had formed by the eye; but this was not the case, for Cortes affirms, in his first letter to the emperor Charles V. that he ordered the houses, which belonged to the district of Tlascala to be numbered, and found there was an hundred and fifty thousand, and in the single city of Tlascala more than twenty thousand.

DISSERTATION VIII.

On the Religion of the Mexicans.

WE have nothing to say in this Dissertation as we had in the others to M. de Paw, as he ingenuously acknowledges the resemblance there is between the delirium of the Americans, and that of other nations of the old continent in matters of religion. “As,” he says, “the religious superstitions of the people of America (1) have had a sensible resemblance to those which other nations of the old continent have entertained, he has not spoken of those absurdities, but to make a comparison of them, and in order to observe that, notwithstanding the diversity of climes, the weakness of the human spirit has been constant and unvariable.” If he had delivered himself with the same judgment in other respects, he would have saved much contention, and preserved his work from those heavy censures which have been made on it by many wise men of Europe. We direct this Dissertation, therefore, to those who, from ignorance of what has passed and passes at present in the world, or from want of reflection, have made much wonder in reading in the history of Mexico at the cruelty and superstition of those people, as if such things had been never heard of among mortals. We shall make their error conspicuous, and shew that the religion of the Mexicans was less superstitious, less indecent, less childish, and less unreasonable than that of the most cultivated nations of ancient Europe ; and that there have been

(i) In the preface to *Recherches Philosophiques*.

been examples of cruelty, perhaps more cruel, amongst all other nations of the world.

The system of natural religion depends principally on that idea which is formed of the Divinity. If the supreme Being is conceived to be a Father full of goodness, whose providence watches over his creatures, love and respect will appear in the exercise of such religion. If, on the contrary, he is imagined to be an inexorable tyrant, his worship will be bloody. If he is conceived to be omnipotent, veneration will be paid to one alone; but if his power is conceived to be confined, the objects of worship will be multiplied. If the sanctity and perfection of his being is acknowledged, his protection will be implored in a pure and holy service; but if he is supposed subject to imperfections, and the vices of men, religion itself will sanctify crimes.

Let us compare the idea, therefore, which the Mexicans had of their gods with that which the Greeks, Romans, and other nations from whom they learned their religion, had of their deities, and we shall discover the superiority of the Mexicans, in this matter, over all those ancient nations. It is true, that the Mexicans divided power among various deities, imagining the jurisdiction of each to be restricted. "I do not doubt," Montezuma used to say to Cortes, in their conferences on religion, "I do not doubt of the goodness of the God whom you adore, but if he is good for Spain our Gods are equally so for Mexico.

"Our God *Camaxtle*," the Tlascalans used to say to Cortes, "grants us victory over our enemies; our god, *deſs Matlalcueje* sends the necessary rain to our fields, and defends us from the inundation of Zahuapan. To each of our gods we are indebted for a part of the happiness

“happiness of our life.” But they never believed their gods so impotent as the Greeks and Romans believed theirs. The Mexicans had more than one deity under the name of Centeotl who took care of the country and the fields, and although they were so fond of their children they had but one god for their protection. The Romans, besides the goddess Ceres, had a crowd of deities for the care of the fields alone (*m*), and for the guard and education of their children upwards of twenty, besides a number which were employed in the generation and birth of infants (*n*). Who would believe that they would have occasion for their Gods merely to guard their doors? Forculus was charged with the door posts, Carna with the hinge, and Lamentinus with the threshold. “Ita,” exclaims St. Augustin, “ita non poterat, Forculus simul fores, et cardinem limenque servare.” So wretched was the power of the gods in the judgment of the Romans! Even the names by which

VOL. III.

3 F

some

(*m*) *Seja* was charged with the grain which was newly sown, *Proserpina* with the grain which was just sprung, *Nodotus* with the knots on the stem, *Volatina* with the eyes on buds, *Patelena* with the leaves which were spread, *Flora* with the flowers, *Segeſta* with the new grains, *Lactantia* with the grain yet milky, *Matuta* with the ripe grain, *Tutanus* or *Tutilina* with the grain in the granary; to all whom we ought to add the god *Sterculius* who attended the manuring of the fields, *Priapus* who defended the grain from the birds, *Rubigo* who defended it from insects, and the nymphs *Napæ* who had the care of its nutritive juices.

(*n*) The goddess *Opis* was charged with giving assistance to the child which was delivering, and to receive it in her lap, *Vaticanus* to open its mouth to cry, *Levana* to raise it from the ground, *Cunina* to watch the cradle, the *Carmentes* to announce its destiny, *Fortuna* to favour it in all accidents, *Rumina* to introduce the nipple of the mother's breast into the mouth of the child, *Potina* took care of its drink, *Educa* of its pap, *Faventia* wiped its flabbings, *Venilia* had to cherish its hopes, *Volupta* to attend its pleasures, *Agenoria* to watch its motions, *Stimula* to make it active, *Strenua* to make it courageous, *Numeria* to teach it numbers, *Camena* singing, *Conſo* to give it counsel, *Seneca* resolution, *Juventa* had charge of its youth, and *Fortuna Barbata* was enjoined that important office of making hair grow upon adults.

some of them were called shew the pitiful conception entertained of them by their adorers. What names more unworthy of divinity than those of Jupiter Pistor, Venus Calva, Pecunia Caca, Subigus and Cloacina? Who would ever think that a statue formed by Tatius in the principal sink of Rome was to become a goddess with the name of Cloacina? This was certainly a mockery of their religion, and rendering the very gods whom they adored, vile and contemptible.

But the Greeks and Romans shewed the opinion they had of their gods in nothing more strongly than the vices which they ascribed to them. Their whole mythology is a long series of crimes: the whole life of their gods was composed of enmities, revenge, incest, adultery, and other base passions, capable of defaming the most degenerate of men. Jove, that omnipotent father, that beginning of all things, that king of men and of gods as the poets call him, appears sometimes disguised as a man to treat with Alcmena, sometimes as a satyr to enjoy Antiope, sometimes as a bull to ravish Europa, sometimes as a swan to abuse Leda, and sometimes in a shower of gold to corrupt Danae, and at other times assumes other forms to accomplish his guilty designs. In the mean time the great goddess Juno, mad with jealousy, thinks of nothing but having revenge of her disloyal husband. Of the same stamp were the other immortal gods; especially the *dii majores*, or select gods, as they were called by them; select, says St. Augustin, for the superiority of their vices, not for the excellence of their virtues. But what good examples could those nations imitate in the gods, who, while they boasted to teach virtue to men, had nothing consecrated but their vices? What merits obtained deification to Leena among the
Greeks,

Greeks, and to Lupa Faula and Faula among the Romans, but that of having been famous courtezans? From thence sprung various deities, charged with the most infamous and shameful employments.

But what shall we say of the Egyptians, who were the first authors of superstition (o)? They not only paid worship to the ox, dog, cat, crocodile, hawk, and other such animals, but likewise to leeks, onions, and garlick, which was the occasion of that satyrical saying of Juvenal, *O sanctas gentes quibus hic nascuntur in hortis Numina!* and, not contented with that, they deified likewise the most indecent things. That custom of marrying with their sisters was imagined to be authorized by the example of their gods.

The Mexicans entertained very different ideas of their deities. We do not find, in all their mythology, any traces of that excess of depravity which characterised the gods of other nations. The Mexicans honoured the virtues not the vices of their divinities; the bravery of Huitzilopochtli, the beneficence of Centeotl, Tzapotlatman, and Opochtli, and others, and the chastity, justice, and prudence of Quetzalcoatl. Although they feigned deities of both sexes, they did not marry them, nor believe them capable of those obscene pleasures which were so common among the Greeks and Romans. The Mexicans imagined they had a strong aversion to every species of vice, therefore their worship was calculated to appease the anger of their deities, provoked by the guilt of men, and to procure their protection by repentance and religious respect.

The

(o) Nos in Templâ tuâ Romanâ accepimus Isin.

Semicanesque Deos et Sistrâ moventia luctum. *Lucanus.*

The rites observed by those nations were entirely agreeable to the idea they had of their gods. Superstition was common to them all, but that of the Mexicans was less, and not so puerile; this the comparison of their auguries will be sufficient to shew. The Mexican diviners observed the signs or characters of the days concerning marriages, journeys, &c. as the European astrologers observed the position of the stars, to foretel from thence the fortunes of men. Both of them were equally fearful of eclipses and comets, as they suspected them the forerunners of great calamities. This superstition has been common to all the people of the world. They were also all afraid of the voice of the owl, or any other such bird. These and other such superstitions have been general, and are still common to the vulgar of the old and new continents, even in the centre of most cultivated Europe. But all which we know of those American nations in this matter, is not to be compared with that which we are told of the ancient Romans by their poets and historians. The works of Livy, Pliny, Virgil, Suetonius, Valerius Maximus, and other judicious authors, which cannot be read without smiling, shew us to what excess the childish superstition of the Romans arrived. No animal among the quadrupeds, reptiles and birds was not employed to foretel future events. If a bird flew towards the left hand, if the raven croaked, if they heard the voice of the crow, if a mouse tasted honey, if a hare passed across the road, all those incidents were prognostics of some great calamity. Formerly there was a lustration made of all Rome for no other reason than because an owl entered the Capitol (*p*).
Not

(*p*) *Bubo funebris et maxime abominatus publicis, precipue auspiciis . . . Capitoli cellam ipsam intravit.* Sex. Papellio Istro L. Pedanis Coss. propter quod nonis Martiis urbs lustrata est eo anno. Plin. Hist. Nat. lib. x. cap. 12.

Not only animals, but also trivial and contemptible circumstances were sufficient to excite superstitious dread; as the spilling of wine or salt, or the falling of some meat from table. Who would not have been amazed to contemplate the aruspices persons of such high respect seriously occupied in examining the movements of the victims, the state of their entrails, and colour of their blood, to prognosticate from those signs the principal events of that famous republic? "I wonder," said the great Cicero, "that an aruspex does not smile when he views another of his own profession." What can be more ridiculous than that kind of augury which was called *tripudium*? Who would have imagined that a nation in some respects so enlightened, and also so warlike, should carry along with their armies, as the most important thing to the success of their arms, a cage of chickens, and dare not to begin the battle without consulting them? If the chickens did not taste the food which was put before them it was a bad omen; if, besides not eating it, they escaped out of the cage, it was worse; if, on the contrary, they eat greedily, the augury was most happy; so that the most effectual means to secure victory would have been to keep the chickens without food, until they were consulted.

To such excesses is the spirit of man led, when resigned to the capricious dictates of passion, or stimulated by fears arising from a sense of his own weakness.

But Americans, Greeks, Romans and Egyptians were all superstitious and puerile in the practice of their religion; not so however, in the obscenity of their rites, because we find not the least traces in the rites of the Mexicans, of those abominable customs which were so common among the Romans and other nations of antiquity.

quity. What could be more indecent than the Eleusian feasts which the Greeks made, or those which the Romans celebrated in honour of Venus, in the calends of April, and above all others those very obscene games which they exhibited in honour of Cybele, Flora, Bacchus, and other such false deities? What rite could be more obscene than that which was observed on the statue of Priapus, among the nuptial ceremonies? How could they celebrate the festivals of such incestuous and adulterous gods but with such obscene practices? How was it possible they should have been ashamed of those vices which they saw sanctioned by their own divinities?

It is true, that although nothing obscene mingled with the rites of the Mexicans, some of them were such, as on the supposition of the Divinity of their gods would have been very indecent, namely that of anointing the lips of the idols with the blood of the victims: but would it not have been more indecent to have given them blows, as the Romans gave the goddess Matuta at the *Matral* feasts? Considering the error of both, the Mexicans were certainly more rational by giving their gods a liquor to taste which they imagined was acceptable to them, than the Romans by executing an action upon their goddess which has been esteemed highly insulting among all nations of the world.

What we have said hitherto, though sufficient to shew that the religion of the Mexicans was less exceptionable than that of the Romans, Greeks, or Egyptians, we are sensible that the comparison between them ought not to have been solely with respect to the above articles, but rather with respect to the nature of their sacrifices. We confess, that the religion of the Mexicans was bloody, that their sacrifices were most cruel, and their austerities
beyond

beyond measure barbarous; but whenever we consider what other nations of the world have done, we are confounded at viewing the weakness of the human mind, and the series of errors into which they have fallen from their miserable systems of religion.

There has been no nation in the world which has not at some time sacrificed human victims to that god whom they adored. We know from the sacred writings, that the Ammonites burned some of their sons in honour of their god Moloch, and that other people of Canaan did the same, whose example was followed by the Israelites. It appears from the fourth book of the Kings, that Achaz and Manasseh, kings of Judea, used that pagan rite of, passing their sons through the fire. The expression of the sacred text appears rather to signify a mere lustration or consecration, than a burnt-offering, but the hundred and fifth Psalm does not leave a doubt that the Israelites sacrificed their children to the gods of the Canaanites. Of the Egyptians we know, from Manetho, a priest and celebrated historian of that nation, cited by Eusebius Cæsariensis, that daily three men were sacrificed in Eliopolis to the goddess Juno alone, in like manner as the Ammonites sacrificed human victims to their Moloch, and the Canaanites to their Beelfegor; the Persians sacrificed to their Mitra or sun, the Phœnicians and Carthaginians to their Baal or Saturn, the Cretans to Jove, the Lacedæmonians to Mars, the Phocians to Diana, the Lesbians to Bacchus, the Thessalians to the Centaur Chiron and Peleus, the Gauls to *Eso* and *Teutate* (q), the *Bardi* of Germany to *Tuiston*, and other nations

(q) A certain French Author, through a blind attachment to his native country, hardily denies that human victims were ever sacrificed by the Gauls; but he

to their tutelar gods. Philon says that the Phœnicians in public calamities offered in sacrifice to their inhuman Baal their dearest sons, and Curtius affirms that such sacrifices were in use among the Tyrians until the ruin of their famous city. The same did the Carthaginians with their countrymen in honour of Saturn the *cruel*. We know that when they were vanquished by Agathocles, king of Syracuse, with a view to appease their deities, whom they believed incensed, they sacrificed two hundred noble children, besides three hundred youths who spontaneously offered themselves for sacrifice, to shew their bravery, their piety towards the gods, and their love to their country; and, as Tertullian affirms, who was an African, and lived little later than that epoch of which we are speaking, and therefore ought to know it well, sacrifices were used in Africa until the time of the emperor Tiberius, as in Gaul till the time of Claudian, as Suetonius reports.

The Pelasgians, the ancient inhabitants of Italy, sacrificed a tythe of their children, in order to comply with an oracle, as is related by D. Halicarnasseus. The Romans, who

he adduces no authority to confute the testimony of Pliny, Suetonius, Diodorus, and in particular Cæsar, who was well acquainted with the Gauls, and knew their customs. “*Natio est omnis Gallorum,*” he says, “*admodum dedita religionibus, atque ob eam causam qui sunt affecti gravioribus morbis, quique in prælio periculisque versantur, aut pro victimis homines immolant, aut se immolatu-ros vovent, ministris ad ea sacrificia Druidibus; quod pro vita hominis, nisi vita hominis reddatur, non posse aliter deorum immortalium numen placari arbitrantur, publiceque ejusdem generis habent instituta sacrificia. Alii immani magnitudine simulacra habent; quorum contexta viminibus membra vivis hominibus complent; quibus succensis circumventi flamma exanimantur homines. Supplicia eorum qui in furto aut latrocinio aut aliqua noxa sint comprehensi gratiora diis immortalibus esse arbitrantur. Sed cum ejus generis copia deficit, etiam ad innocentium supplicia descendunt.*” Lib. vi. de Bello Gallico, cap. 15. From this it appears the Gauls were more cruel than the Mexicans.

who were as sanguinary as they were superstitious, did not abstain from such kind of sacrifices. All the time they were under the government of their kings, they sacrificed young children to the goddess Mania, mother of the *Lares*, for the prosperity of their houses, to which they were directed by a certain oracle of Apollo, as Macrobius says; and we know from Pliny, that human sacrifices were not forbid until the year 657 of Rome (*r*); but notwithstanding this prohibition, those examples of barbarous superstition did not cease; since Augustus, as authors cited by Suetonius affirm, after the taking of Perugia (*s*), where the consul L. Antony, had fortified himself, sacrificed in honor of his uncle Julius Cæsar, who was by this time deified by the Romans, three hundred men, partly senators and partly Roman knights, upon an altar erected to that new deity. Lactantius, who was a man well instructed in the affairs of the Romans, who flourished in the fourth century of the church, says expressly, that even in his time, those sacrifices were made to Jupiter Latialis (*t*). Nor were the Spaniards free from this barbarous superstition. Strabo recounts, in book iii. that the Lusitanians sacrificed prisoners, cut off their right hand to consecrate it to their gods, observed their entrails, and examined them for auguries; that all the inhabitants of the mountains used to sacrifice prisoners as well as horses, offering their victims by hundreds at a time to the god Mars; and speaking in general, he

VOL. III.

3 G

says,

(*r*) DCLVII. demum anno urbis Cn. Corn. Lentulo. P. Licinio Coff. Senatus consultum factum est, ne homo immolaretur. Plin. Hist. Nat. lib. xxx. cap. I.

(*s*) Perugia capta in plurimos animadvertit; orare veniam, vel excusare se conantibus una voce occurrens, moriendum esse. Scribunt quidam trecentos ex deditiis electos utriusque ordinis ad aram D. Julio exstructam Idib. Martiis victimarum more maceratos. Suetonius in Octaviano.

(*t*) Lactantius, Instit. Divin. lib. i. cap. 21.

says, it was peculiar to the Spaniards to sacrifice themselves for their friends. This is not very different from what Silius Italicus reports of the *Betici*, his ancestors, which is, that after they had passed the age of youth, grown weary of life, they committed suicide ; and which he praises as an heroic action. Who would believe, that ancient custom of Betica would be revived at this time in England and France. To come to later times, Mariana, in speaking of the Goths, who occupied Spain, writes thus : “ Because they were persuaded that the war “ would never be prosperous when they did not make “ an offering of human blood for the army, they sacrific- “ ed the prisoners of war to the god Mars, to whom “ they were principally devoted, and used also to offer “ him the first of the spoils, and suspend from the trunks “ of trees the skins of those whom they had slain.” If those Spaniards who wrote the history of Mexico, had not forgotten this, which happened to their own peninsula, they would not have wondered so much at the sacrifices of the Mexicans.

Whoever would wish to see more examples, may consult Eusebius of Cæsarea, in book iv. *de Preparatione Evangelica*, where he gives a long detail of the nations by whom such barbarous sacrifices were practised ; what we have said is enough to shew that the Mexicans have done nothing but trod in the steps of the most celebrated nations of the old continent, and that their rites were neither more cruel, nor less rational. It is, perhaps, greater cruelty, and inhumanity to sacrifice fellow-citizens, children, and themselves, as the greater part of those nations did, than to sacrifice prisoners of war as was practised among the Mexicans. The Mexicans were never known to sacrifice their own countrymen, unless

it

it was those who forfeited their lives by their crimes; or the wives of nobles, that they might accompany their husbands to the other world. That answer which Montezuma gave to Cortes, who reproached him for the cruelty of the Mexican sacrifices, shews us that although their sentiments were not just, they were less inconsistent than those of other nations who had fallen into the same superstitions. "We," he said, "have
"a right to take away the life of our enemies; we
"could kill them in the heat of battle, as you do your
"enemies. What injustice is there in making them,
"who are condemned to death, die in honour of our
"gods."

The frequency of such sacrifices was certainly not less in Egypt, Italy, Spain, and Gaul, than in Mexico. If in the city of Eliopolis alone, they annually sacrificed, as Manetho says, more than a thousand victims to the goddess Juno; how many must have been sacrificed in the other cities of Egypt to the famous goddess Isis, and other innumerable deities, adored by that most superstitious nation? How frequent must they have been among the Pelasgians, who sacrificed a tenth part of their children to their gods? What numbers of men must have been consumed in those hecatombs of the ancient Spaniards? And what shall we say of the Gauls, who, after having sacrificed prisoners of war and malefactors, made also innocent citizens die in sacrifice, as Cæsar relates? The number of the Mexican sacrifices has certainly been exaggerated by the Spanish historians, as we have already observed.

The very humane Romans, who had scruples in observing human entrails, although at the end of six centuries and a half after the foundation of their famous metropolis

metropolis they forbid the sacrifices of men, still permitted with great frequency the gladiatorian sacrifices. So we call those barbarous combats, which, as well as serving for the amusement of that fierce people, were likewise prescribed by their religion. Besides the great quantity of blood spilt at the Circensian games, and at banquets, there was not a little also shed at the funerals of wealthy persons, either of gladiators, or prisoners who were put to death to appease the manes of the deceased; and they were so firmly persuaded of the necessity of some human blood being spilt for this purpose, that when the circumstances of the dead could not bear the expense of gladiators or prisoners, *presicæ* were paid, that they might draw blood from their cheeks with their nails. How many victims must thus have fallen by the superstition of the Romans, at their funerals, especially as they vied with each other who should exceed in the number of gladiators and prisoners whose blood was to celebrate the funeral pomp? It was this bloody disposition of the Romans which made such havoc on the people of Europe, Asia, and Africa, and which, besides overflowed Rome with the blood of its own citizens, especially during those horrid proscriptions which sullied the glory of that famous republic.

The Mexicans were not only inhuman towards their prisoners, but likewise towards themselves, by their barbarous austerities mentioned in this history. But the drawing of blood with the prickles of the aloes from their tongues, arms, and legs, as they all did, and the boring their tongue with pieces of cane, as the most austere among them used to do, will appear but slight mortifications compared with those dreadful and unheard-of austerities executed upon themselves by penitents of the

the East-Indies and Japan, which cannot be read without horror. Who will ever think of comparing the inhumanities of the most famous *Tlamacazqui* of Mexico, and Tlascala, with those of the priests of Bellona and Cybele (*u*)? When did the Mexicans tear their limbs, or their flesh with their teeth, or castrate themselves in honour of their gods, as those priests did in honour of Cybele?

Lastly, the Mexicans not content with sacrificing human victims, eat also their flesh. We confess in this their inhumanity surpassed other nations; but examples of this kind have not been so rare even among cultivated nations of the old continent, as to make the Mexicans be classed with nations absolutely barbarous. That horrible custom, says the historian Solis, of men eating each other, was seen first among the barbarians in our hemisphere, as is confessed by Gallicia, in his Annals. Besides the ancient Africans, whose descendants at this day are in part cannibals, it is certain, that many of those nations which were formerly known by the name of Scythians, and also the ancient inhabitants of Sicily, and the

(*u*) Deæ Magnæ Sacerdotes, qui Galli vocabantur, virilia sibi amputabant, & furore perciti caput rotabant cultrisque faciem musculosque totius corporis dissecabant: morsibus quoque se ipsos impetebant. *August. de Civ. Dei.* lib. ii. cap. 7.

Ille viriles sibi partes amputat, ille lacertos secat. Ubi iratos Deos timent, qui sic propitios merentur? . . . Tantus est perturbatæ mentis & sedibus suis pulsæ furor, ut sic Dii placentur, quemadmodum ne homines quidem sæviunt teterrimi, & in fabulas traditi crudelitatis Tyranni laceraverunt aliquorum membra; neminem sua lacerare jusserunt. In regia libidinis voluptatem castrati sunt quidam; sed nemo sibi, ne vir esset, jubente domino manus intulit. Se ipsi in templis contrucidant, vulneribus suis ac sanguine supplicant. Si cui intueri vacet quæ faciunt, quæque patiuntur, inveniet tam indecora honestis, tam indigna liberis, tam dissimilia fanis, ut nemo fuerit dubitaturus furere eos, si cum paucioribus furerent; nunc sanitatis patrociniū insanientium turba est. *Seneca, lib. De Superstit.*

the continent of Italy, as Pliny and other authors say, were men-eaters likewise. Of the Jews, who lived in the times of Antiochus *the illustrious* Appion, an Egyptian, not Greek writer, as M. de Paw says, has written, that they used to keep a Greek prisoner to eat him at the end of one year. Livy says of the famous Hannibal, that he made his foldiers eat human flesh to encourage them to war. Pliny severely censures the Greeks for their custom of eating all the parts of the human body, to cure themselves of different distempers (*). Is there any wonder then that the Mexicans should do that from a motive of religion, which the Greeks observed as a rule of medicine. But we do not pretend to apologise for them on this head. Their religion, with respect to Cannibalism, was certainly more barbarous than that of the Romans, Egyptians, or those other cultivated nations; but, at the same time, in other points, it is not to be denied, that it was less superstitious, less absurd, and less indecent.

(*) Quis invenit singula membra humana mandere? Qua conjectura inductus? Quam potest medicina ista originem habuisse? Quis veneficia innocentiora fecit quam remedia? Esto, barbari externique ritus invenerint; etiam ne Græci suas fecere has artes? &c. *Plin. Hist. Nat. lib. xxviii. cap. i.*

DISSERTATION IX.

On the Origin of the French Evil.

IN the present Differtation we have not only to dispute with M. de Paw, but also with almost all Europeans, who are generally persuaded that the French evil had its origin in America; for some nations of Europe having reciprocally accused each other of propagating this opprobrious distemper, at last agreed to charge it upon the new world. We should certainly deserve to be taxed with rashness in combating so universal an opinion, if the arguments which we are to offer, and the example of two modern Europeans, did not render our attempt pardonable (*a*). As among the supporters of the common opinion, the principal, the most renowned, and he who has written most copiously and learnedly upon the subject, is Mr. Astruc, a learned French physician, he will necessarily be principally opposed by us, for which purpose we shall make use of those very materials which his work presents to us (*b*).

SECT.

(*a*) These two authors are William Becket, a Surgeon of London, and Antonio Ribero Sanchez. Becket wrote three Differtations, which were inserted in vol. xxx. and xxxi. of the Philosophical Transactions, to prove, that the French evil was known in England as far back as the fourteenth century. Ribero wrote a Differtation, which was printed in Paris, with this title, *Differtation sur l'Origin de la Maladie Venerienne, dans la quelle on prouve qu'elle n'a point été portée de l'Amerique*. Having read the title of this Differtation in the Catalogue of Spanish books and manuscripts, prefixed to Dr. Robertson's History of America, we sought for it in Rome, in Genoa, and Venice, but without success.

(*b*) De Morbis Venericis, vol. ii. Venice Edition.

S E C T. I.

The Opinion of the first Physicians concerning the Origin of the French Evil.

DURING the first thirty years after the French evil began to be known in Italy, there was not a single author, as we shall mention afterwards, who ascribed the origin of it to America. All the authors who wrote upon it, before 1525, and even some of those who wrote after, attributed it to different causes, the mention of which will excite the smiles and pity of our readers.

Some of the first physicians then living, namely, Corradino Gillini, and Gaspare Torella, were persuaded, according to the ideas of those times, that the French evil was occasioned by the near conjunction of the Sun with Jupiter, Saturn, and Mercury, in the sign of Libra, which happened in 1483.

Others, in agreement with the opinion of the celebrated Nicolaus Leonicens (c), attributed it to the very abundant rains and inundations which happened in Italy that year in which the contagion began.

G. Manardi, a learned professor of the university of Ferrara, ascribed the origin of the evil to the impure commerce of a Valentian gentleman who was leprous, with a courtezán; and Paracelsus to the commerce of a French person who was also leprous, with a prostitute. Antonia Musa Brasavola, a learned Ferrarese, affirms, that the French evil took its beginning from a courtezán,

(c) Itaque dicimus, malum hoc, quod *morbum Gallicum* vulgo appellant inter epidemias debere connumerari . . . Illud satis constat, eo anno magnam aquarum, per universam Italiam fuisse exuberantiam . . . æstivam autem ad illam venisse intemperiem calidam scilicet & humidam, &c. *Opus. de Morbo Gallico.*

zan, in the army of the French in Naples, who had an abscess in the mouth of the *uterus*.

Gab. Fallopio, a celebrated Modenese physician, affirms, that the Spaniards, being few in number in the war of Naples, and the French extremely numerous, one night poisoned the water of the wells, of which their enemies were to drink, and that from thence the distemper arose.

Andrea Cesalpino, physician to Clement VIII. says, he knew from those who were present at the war of Naples, when the French besieged Somma, a place of Vesuvius, where there is a great abundance of excellent Greek wine; that the Spaniards escaped one night in secret, leaving behind them a great quantity of that wine, mixed with the blood of the sick of San Lazaro, and that the French when they entered that place drank of this wine, and soon after felt the effects of the venereal disorder.

Leonardo Fioravanti, a learned Bolognese physician, says in his work, entitled, *Capricci Medicinali*, that he was informed by the son of one who had been sutler to the army of Alfonso, king of Naples, about the year 1456, that the army of the king, as well as the French, becoming short of provisions from the length of the war, the sutler supplied them both with dressed human flesh, and that from thence sprung the French evil. The celebrated chancellor Bacon, lord Verulam, adds (*d*), that the flesh supplied them, was of men killed in Barbary, which they prepared like the tunny fish.

As no body knew, nor could know, who was the first in Europe that suffered that great evil, neither can we know the cause of it: but let us attend to what may have happened.

S E C T. II.

The French Evil could be communicated to Europe from other Countries of the old Continent.

TO prove that the French evil could be communicated by means of contagion to Europe, from other countries of the same continent, it is necessary, but will be also sufficient to shew that that evil was first felt in some of those countries, and that they had commerce with Europe before the new world was discovered. Both of these points shall be fully demonstrated.

Vatablo, Pineda, Calmet, and other authors, have maintained, that among the distempers with which Job was afflicted, the French evil was one. This opinion is so ancient, that as soon as that evil appeared in Italy, some called it the evil of Job, as Battista Fulgoso, an author then living, attests (*e*). Calmet attempts (*f*) to prove his opinion with a great deal of erudition; but as we know nothing of the complaints of Job, except what is mentioned in the sacred books, which may easily be conceived to speak of other distempers then known, or of some one entirely unknown to us, we can therefore build little on this opinion.

Andrè Thevet, a French geographer (*g*), and other authors affirm, that the French evil was endemic in the internal provinces of Africa, situate on both sides of the river Senegal.

And Cleyer, first physician of the Dutch colony, in the island of Java, says (*b*), that the venereal disease was

(*e*) In a work entitled, *Dicta Factaque Memorabilia*, lib. i. c. 4.

(*f*) *Dissert. in Morbum Jobi*.

(*g*) *Cosmographie Univerfelle*, liv. I. cap. II.

(*b*) *Epist. ad Christ. Mentzium*.

was proper and natural to that isle, and as common as the quotidian fever. Thuanus has affirmed the same thing (*i*).

J. Bonzius, physician to the Dutch in the East-Indies, testifies, that (*k*) that distemper was endemic in Amboyna and the Moluccas, and that it was not necessary to have any previous carnal commerce to catch the infection. This was confirmed in part by the account of the companions of Magellan, the first who made the tour of the world in the famous vessel, *Victory*, who attested, as Herrera says (*l*), that they found in Timor, an island of the Moluccan Archipelago, a great number of the islanders infected with the French evil; which was certainly neither carried there by the Americans nor Europeans, previously diseased.

Forneau, a French Jesuit, learned, accurate, and experienced in the affairs of China, having been asked by Mr. Astruc (*m*), if the physicians of China thought the venereal distemper originated in their country, or brought there from other places; answered, that the Chinese physicians whom he had consulted were of opinion, that that distemper was suffered there since the earliest antiquity; and that the Chinese books written in Chinese characters, which were esteemed by them to be ancient, said nothing of the origin of that disease, but make mention of it as a distemper very ancient even at that time, in which these books were written; that also it was neither known, nor probable, that the distemper was carried there from other countries.

Lastly,

(*i*) Hist. Sui Temporis, cap. 71.

(*k*) In Methodo medendi quo in Indiis Orientalibus oportet uti in cura morborum illic vulgo ac populariter grassantium.

(*l*) Dec. III. lib. iv. cap. 1.

(*m*) Differt. de Origine Morborum Venereorum inter Sinias. Ad Calc. tom. i.

Lastly, Dr. Astruc says, according to his opinion (*n*), after having examined and weighed the testimonies of authors, that the venereal disease was not peculiar solely to the island Haiti, or Hispaniola, but also common to many regions of the old continent, and, perhaps, to all the equinoctial countries of the world in which it prevailed from antiquity. This ingenuous confession, from a person so well informed on this subject, and besides so prejudiced against America, as well as the testimonies above mentioned, are sufficient to demonstrate, that although we suppose the French evil to have been anciently existing in the new world, nothing can be adduced on this subject by the Europeans against America, that cannot be said by America against many countries of the old world, and that if the blood of the Americans was corrupted, as M. de Paw would argue, that of the Asiatics and Africans was not more wholesome.

Dr. Astruc adds, that from those countries of Asia and Africa, in which the French evil was endemic, it might be communicated by commerce to the neighbouring people, though not to the Europeans; because, the torrid zone having been deemed uninhabitable, there was no commerce between those countries and Europe. But who is ignorant of the commerce which Egypt had for many centuries with the equinoctial countries of Asia, and on another side with Italy? Why therefore, might not the Asiatic merchants have brought along with their drugs the French disease into Egypt, and from thence the Venetians, Genoese, and Pisans, carry it into Italy, as they had for a long time a continual commerce with the city of Alexandria, in the same manner as other Europeans carried into Italy from Soria and Arabia, the leprosy

(*n*) De Morbis Venereis, lib. i. cap. II.

profy and small-pox? Besides, among the many Europeans, who, from the twelfth century forward, undertook to travel into the southern countries of Asia, namely B. di Tudela, carpini, Marco Polo, and Mandeville; amongst whom some, as M. de Paw says, advanced as far as China, might not one bring with him on his return to Europe, the infection from those Asiatic countries? Here we do not treat of what actually did happen, but only of that which might have happened.

The French evil might not only pass from Asia, but also from Africa into Europe, before the discovery of America; as the Portuguese, thirty years before the glorious expedition of Columbus, had discovered a great part of the equinoctial countries of Africa, and carried on commerce there. Might not some Portuguese, therefore, infected thence with the French evil, communicate it to his country people, and in course to other nations of Europe, as possibly did happen from what we shall say presently? Dr. Astruc may thus observe, by how many channels the French evil might be communicated to Europe without the intervention of America, although the ancients conceived the torrid zone inaccessible.

S E C T. III.

The French Evil might arise in Europe without Contagion.

BEFORE we handle this argument, it is necessary to say a little on the nature and physical cause of this distemper. The French distemper is, according to physicians, a species of *cachexia*, in which the lymph, and particularly the wheyish part of it, assumes a singular thickness and acrimony. The venereal poison, says Astruc

Astruc (o), is of a salt, or rather acid salt, corrosive, and fixed nature. It occasions the condensation and acrimony of the lymph, and from thence proceed the inflammations, warts, ulcers, erosions, pains, and all the other horrid symptoms known to physicians.

This poison, when communicated to a sound man, ought not to be considered, says this author, as a new humour added to the natural humours, but rather as a mere *dyscrasia*, or vicious quality of the natural humours, which degenerating from their natural state, are changed into acid salts.

Almost all physicians have been persuaded, that this evil cannot arise otherwise than by means of contagion communicated by the feminal liquor, or by milk, or saliva, or sweat, or by contact with venereal ulcers, &c. But we presume to maintain, that the French evil can positively be produced in man, without any contagion or communication with those infected; because it can absolutely be generated in the same manner as it was generated in the first person who suffered it; such person could not get it by contagion, because he would not in that case have been the first who suffered it, but from another cause very different; therefore, by a similar cause, whatever it was, some *cachexia* might have been produced without contagion, in other individuals of the human species. This is true, says Astruc in America, or another such country, but not in Europe. But wherefore exempt Europe? Because, says this author, the causes which could at first have occasioned this evil in America, do not take place there; and what are those causes? Let us examine them.

In

In the first place Dr. Astruc says (*p*) that the air ought not to be numbered among the causes, as although it might occasion other disorders in the island of Hispaniola it could not cause the venereal disease, because the Europeans who for two hundred years and upwards inhabited that island have not contracted that distemper but by means of contagion; and the air is not at present different to what it was three hundred years ago: and if it should be different at present, at least it was not so in the beginning of the fifteenth century. We ought, therefore, to make no conclusions from the air in treating of the origin of this evil. Although Dr. Astruc excludes the air from the number of the causes of the French evil, he has recourse to it in open contradiction to himself, in another place.

Two causes alone are assigned by Dr. Astruc; these are food and heat. As to food, he says, that the inhabitants of Hispaniola, when their maize, casava, &c. were scarce, fed on frogs, worms, bats, and such like small animals. With respect to heat he affirms, that the women of hot countries are much afflicted with acrid, and as it were, virulent courses, particularly if they eat unwholesome food. On that supposition the author speaks thus: “ Multis ergo & gravissimis morbis indigenæ insulæ Haitî affici olim debuerunt, ubi nemo a menstruatibus mulieribus se continebat: ubi viri libidine impotentes in venerem obviam belluarum ritu agebantur: ”

(*p*) Videtur quidem e numero causarum expungendus aer, qui in Hispaniola morbos alios forsan inferre potuit, at vero luem veneream minime. Utique constat. Europæos, qui eam insulam jam a 200 annis (*immo pene 300*) incolunt luem veneream ibidem nunquam contraxisse nisi contagione. Europæi tamen aerem ibidem ducunt & eundem, quem olim ducebant indigenæ, & dubio procul eodem modo temperatum & constitutum. Astruc De Morbis Venereis, lib. i. c. 12.

“ tur : ubi mulieres, quæ impudentissimæ erant, viros
 “ promiscue admittebant, ut testatur Confalvus de Ovi-
 “ edo Hist. Indiar. lib. v. cap. 3. immo eosdem & plures
 “ impudentius provocabant menstruationis tempore, cum
 “ tunc incalescente utero libidine magis insanirent pecu-
 “ dum more. Quid igitur mirum varia, heterogenea,
 “ acria multorum virorum semina una confusa, cum acer-
 “ rimo & virulento menstruo sanguine mixta intra ute-
 “ rum æstuantem & olidum spurcissimarum mulierum
 “ coercita, mora, heterogeneitate, calore loci brevi com-
 “ putruisse, ac prima morbi venerei semina constituisse,
 “ quæ in alios, si qui fortè continentiores erant, dimana-
 “ vere ?”

This is the whole discourse of Dr. Astruc on the origin of the venereal distemper, and is full from beginning to end of falsity, as we shall presently demonstrate : but allowing that it was true what he says happened in Hispaniola, the same thing might have happened in Europe ; because as those Americans when they were in want of maize and other food fed on frogs, worms, &c. in like manner the Europeans, when they were in want of wheat and other good aliment, have been obliged to eat rats, lizards, and such little animals, the excrements of other animals, and even bread made of human bones, which brought them various disorders. It is sufficient to call to mind the horrid famine formerly suffered in Europe, partly by severe weather, partly by war. There have been men too there who have, like beasts, allowed themselves to be led away by intemperate lust to the most execrable excesses. There have always been abandoned and filthy women too, and what Plautus said might be affirmed with respect to them, *Plus scortorum ibi est, quam muscarumtum, cum caletur maxumè*. Extreme acrid
 feminal

feminal fluids, *uteri estuantes* and virulent courses, have never been wanting either. Such causes therefore could have produced the French evil in Europe, as they produced it, according to Astruc, in America.

“No,” answers this author; “they could not; because the air being more temperate in Europe, (he has recourse to the air, after he had excluded it from the number of causes of the French evil) *non adest eadem in virorum semine acrimonia, eadem in menstruo sanguine virulentia, idem in utero mulierum fervor, quales in insula Haiti fuisse probatum est*: (the proofs of Dr. Astruc are no others than those above set forth whence he adds,) that those symptoms cannot be produced there from a similar concurrence of causes. Of diseases, and their causes also, we ought to judge, as of the generation of animals and plants. As lions are not bred in Europe, nor apes propagate, nor parrots build their nests, nor many Indian or American plants grow in Europe, although they are sown there; in like manner, the French evil could never be produced in Europe by these causes, from whence, as we have already said it was, produced in Hispaniola; because every clime has its particular properties, and those things which arise in one clime spontaneously can by no art be produced in another; for as the poet says, *non omnis fert omnia tellus*.”

We shall grant many things to Dr. Astruc which would not be granted to him by any other person. We grant that there has never been in Europe that abuse of *feminarum menstruatorum*, nor that acrimony nor virulence in the fluids of the human body, nor that heat in the *uterus* which he supposes in the island of Hispaniola; although the contrary appears from the books of medi-

cine published in these last two hundred years. We grant to him that they have no examples there of luxurious excesses; because to him it appears too much to confess them to have been in Europe (*q*); and we grant to him also, that all the women of Europe have been most healthy and chaste. All that we grant to him, though it is contradicted by history, and the common opinion of Europeans themselves. Notwithstanding, we affirm, that the French evil could be generated in Europe without contagion; because all those disorders which Astruc supposes to belong to the island of Hispaniola, could also take place in Europe, although they never had been known there. Those chaste women induced by violent passions, which are common to all the children of Adam, might become as incontinent and abandoned as that author supposes the Americans of Hispaniola were. Those sound and healthy men might find an aliment as pernicious as that which was the food of the natives of *Haiti*. The human sperm, which of itself is very acrid, as Astruc says, might, by reason of unwholesome food, become more and more so, until it had that degree of acrimony, which produces the venereal ailment. The *menfes* might become virulent, either from suppression, or plethora, or many other causes in the fluids or the vessels. It appears from the letters of Christopher Columbus, quoted by his learned son D. Ferdinand, that he landed the first time in Hispaniola, on the 24th of December, 1492, because a vessel of his miserable fleet had struck upon a sand bank; that all the time he remained there from the 24th of December to the 4th

(*q*) Sed esto: demus in Europa venerem æque impuram, atque in Hispaniola exerceri; neque enim contra pugnare placet, quanquam ea tamen nimia videntur. *Astruc De Morbis Venereis*, lib. 1. cap. 12.

4th of January, they were employed in getting the wood and timbers of the vessel up from the sand, to erect a little fortress, in which he left forty men, and embarked that same day with the rest of his people for Spain, to bear the news of the discovery of that new world. All the circumstances of their arrival in that island do not allow us to suspect, that the Spaniards had opportunity to have such commerce with any of the American women as to depart infected by them. Their mutual admiration of each other, the sight of so many new objects, and the very short stay of only eleven days, which were employed in the great fatigue of getting up the wreck, and erecting that fort in so much haste, after the inconveniencies of the longest and the most dangerous voyage which had ever been performed, make a conjecture of this kind entirely improbable. It is not less improbable, from the silence of Columbus himself, his son D. Ferdinand, and of Peter Martyr d'Angheira, who in describing the sufferings of that voyage, say nothing of such a distemper.

But although we should grant, that those Spaniards who returned from the first voyage were infected by the French evil, we should still say, that the contagion of Europe did not proceed from them, according to the testimony of some respectable authors then living. Gaspare Torrella, a learned physician above mentioned, says, in his work, entitled, *Aphrodysiacum* (r), that the French evil began in Alverne, a province of France, very distant from Spain, in 1493. B. Fulgosio or Fregoso, doge of Genoa, in 1478, in his curious work, entitled,

Dicta

(r) Incepit hæc maligna ægrotudo in Alvernia anno M.CCCCXCIII. & sic per contagionem pervenit, &c.

Dicta Factaque Memorabilia, and printed in 1509, affirms (s), that the French evil began to be known two years before Charles VIII. came into Italy. He came into Italy, in September 1494, therefore that evil was known ever since 1492, or at the latest in 1493, that is, some years before Columbus returned from his first voyage. Juan Leone, once a Mahometan, a native of Granada in Spain, vulgarly called *Leone Africano*, in his description of Africa, written in Rome, under the pontificate of Leo X. after he was converted, says, that the Hebrews, when driven from Spain, in the times of Ferdinand the Catholic, carried the French evil into Barbary, and infected the Africans; on which account it was then called the *Spanish evil* (t). The edict of the Catholic kings respecting the expulsion of the Hebrews, was published in March 1492, as Mariana says, allowing them no more than four months to sell all their effects, if they did not choose to carry them along with them; and in the following month, another edict was published by T. Torquemada, inquisitor-general, in which it was prohibited to Christians, under the heaviest penalties, to treat with the Hebrews, or to furnish them with

(s) Biennio antequam in Italiam Carolus (VIII.) veniret, nova ægritudo inter mortales detecta fuit, cui nec nomen, nec remedia Medici ex veterum Auctorum disciplina inveniebant, varie, ut regiones erant, appellata. In Gallia Neapolitanum dixerunt morbum, at in Italia Gallicum appellabant. Lib. i. cap. 4. sect. ultimo.

(t) Hujus mali ne nomen quidem ipsis Africanis notum erat antequam Hispaniarum Rex Ferdinandus Judæos omnes ex Hispania profligasset: qui ubi in patriam jam redissent. cæperunt miseri quidam ac sceleratissimi Æthiopes cum illorum mulieribus habere commercium, ac sic tandem veluti per manus pestis hæc per totam se sparfit regionem, ita ut vix sit familia, quæ ab hoc malo remanserit libera. Id autem sibi firmissime atque indubitate persuaserunt ex Hispania ad illos transmigrasse. Quamobrem & illi morbo *Malum Hispanicum* (ne nomine destitueretur) indiderunt. Lib. I.

with provisions after the term prescribed by the king ; so that all but those who became, or feigned to be Christians, were compelled to quit Spain, before Columbus set out to discover America, as he did not weigh anchor before the 3d of August that year ; the French evil, therefore, began in Europe before America was discovered. We find besides, among the poetry of Pacificus Maximus, a poet of Ascoli, published in Florence, in 1479, some verses, in which he describes the *gonorrhœa virulenta* and venereal ulcers which he suffered, occasioned by his excesses (*u*).

Oviedo, not content with affirming, that the French evil came from Hispaniola, attempts to prove it. Behold his first proof. 1. *That horrid complaint of the biles is cured by the guaiacum better than any other medicine ; and Divine mercy where it permits evil for our sins, provides there, in compassion to us, a remedy.* If this argument could hold, we should conclude, that Europe, rather than Hispaniola, was the native country of the French evil : as many persons know that the most powerful remedy against that disorder is mercury, which is common in Europe, but has not been found in Hispaniola, nor known by the Indians : it is certain, that as soon as the French disease appeared in Europe mercury was employed, and that Carpi, Torella, Vigo, Hooch, and many other famous physicians of that time, made use of it, although it was discredited afterwards by the indiscretion of some empirics, and grew for some time into disuse. *Guaiacum* was not first made use of until 1517, twenty-five years after the discovery of the French evil. Sarsaparilla

(*u*) Hecatalegii, lib. iii. Ad Priapum et lib. viii. ad Mentulam. We do not copy the verses on account of their indecency.

faparilla began to be employed in 1535, and China root about the same time ; and saffrafas a little after.

The other proof by Oviedo, for he only offers two, is, that among the Spaniards who returned with Columbus from his second voyage in 1496, was D. P. Margarit, a Catalonian, “ who,” he says, “ was so ailing, and “ complained so much, that I do believe he felt those “ pains which persons infected with such distempers feel, “ though I never saw a pimple in his face. A few “ months after in the same year, this ailment began to “ be felt amongst some prostitutes ; for, at first, the distemper was confined to low people. It happened afterwards, that the great captain was sent with a large “ and fine army into Italy, . . . and among those Spaniards who went in this force were many infected with “ this distemper ; from whom, by means of women, &c.” such are Oviedo’s proofs, which have not merited even this mention.

M. de Paw thinks he has gained the argument, and demonstrated the truth of the common opinion, from the testimony of Roderigo Diaz de Isla, a physician of Seville, whom he calls a contemporary author, as he thinks his testimony decisive ; but Diaz was neither a contemporary author, having written sixty years after the discovery of the French evil, nor does his account merit any faith. He says, that the first Spaniards, when they returned with Columbus from Hispaniola, in 1493, carried the contagion to Barcelona where the court was then held ; that this city was the first infected ; that it made such havoc there, that prayers, fasting, and almsgiving were appointed to appease the anger of God ; that Charles of France, having gone the year after into Italy, certain Spaniards who were infected there, or many regiments

as M. de Paw says, sent by Spain, to repel the invasion of king Charles, gave the French the infection. But we know from history, that no regiment, either sound or infected, nor any other Spaniard were sent into Italy before Charles went out of Naples with his army, then infected, to return into France. With respect to the contagion of Barcelona, we know that when Columbus arrived, Oviedo was then at that place. But if that which the Sevililian physician relates is true, Oviedo, who was searching every where for proofs to confirm his extravagant opinion, would most unquestionably have alleged the havoc occasioned there, those prayers, fastings and charities, and not have made use of those miserable proofs of *guaiacum*, and the complainings of Margarit. But besides, the French evil is still more ancient than that epoch in Europe, as we have already explained.

It appears, that the physicians of Seville in those times were the worst informed with respect to the origin of the French evil; as Nicolas Monardes, a physician also of that city, and contemporary of Diaz, gives so fabulous an account of it, that we cannot read it without losing all patience. He says, “ that in the year 1493, in the
“ war of Naples, between the Catholic and the French
“ kings, Columbus arrived after his first discovery of the
“ island of Hispaniola, and brought with him from that
“ island a multitude of Indians, men and women, whom
“ he carried to Naples, where the Catholic king then
“ was, after the war was over. And as there was peace
“ between the two kings, and the armies communicated
“ together, when Columbus came there with his Indian
“ men and women, the Spaniards began to have com-
“ merce with the Indian women, and the Indians with
“ the Spanish women, and in that manner the Indian
“ men

“ men and women, infected the Spanish army, the Italians, Germans, &c.” Who could believe that a literary Spaniard would disfigure the public facts of his own nation, which occurred not more than eighty years before, so much that not one of his propositions is correct; but when he means to disparage America he loses all regard to truth. It is certain and notorious, that there was no war between Spain and France in 1493; that the Catholic king was not then in Naples, but in Barcelona, nor recovered of his wounds which he had received from a mad person; that Columbus did not bring with him a multitude of Indian men and women, but only ten men; that Columbus did never come into Italy after his glorious expedition; that the Indians he brought with him never saw Italy.

After having made the most diligent enquiry, we discover no grounds for believing the French evil came from America into Europe; we rather find ourselves induced to believe it as well as the small-pox, was brought from Europe to America. 1. Because, neither Columbus, in his journal, nor his son, in the life of his renowned father, who saw those countries, and noted their peculiarities, make mention of the French evil, although they relate minutely the hardships and sufferings of the first voyages. Neither is there any mention made of it in the histories of those countries written by Peter Martyr of Angheira (*), an author contemporary with Columbus, and well-informed, having been prothonotary to the council of the Indies, and abbot of Jamaica. Oviedo, the first who attributed that distemper to America, did not go there till twenty years after the island

(*) Of all things which were brought from the West-Indies belonging to the art of medicine. Part i. cap. 9.

island Haiti had been inhabited by the Spaniards. What we say of the silence of these authors respecting the Antilles, we may also say of that of the first historians of the other countries of America. 2. If America had been the real native country of the French evil, and if the Americans had been the first who suffered it, it would have been more prevalent there than in any other country, and the Americans would have been more subject than any other nation to that evil; but this is not the case. Of the Indians of the Antilles we can say nothing; for it is now two centuries since they have been totally extinct: but among the present inhabitants of those islands, that contagion is less frequent than among the people in Europe, and seldom appears but where there is a great concourse of soldiers and seamen. In the capital of Mexico, some whites and Indians are infected with the venereal disorder, but very few in proportion to the number of the inhabitants. In other great cities of that vast kingdom, the contagion is extremely rare, and in some it is hardly known; but in those settlements of Americans, where there is no resort of seamen or soldiers, the distemper is never seen or heard of. With respect to South America, we have been informed by persons of accuracy, sincerity, and great acquaintance with those countries, besides what we have known ourselves, that in the provinces of Chili, and those of Paraguay, that distemper is extremely uncommon among the whites, and never seen among the Americans. Some missionaries who have resided some twenty, others thirty years, among different nations of America, agree in affirming, that they have never seen a person infected with that disease, nor ever known that any was.

As to the provinces of Peru and Quito, Ulloa says (y), that although in those countries the venereal distemper is common among the whites and other races of men, it is very rare to see an Indian infected. America, therefore, is not the parent of that disease, of that evil, as has been vulgarly said nor ought such a distemper, as M. de Paw would insinuate, to be considered as a consequence of the corrupted blood, and vitiated constitution of the Americans.

What then is the native country of the French evil; as it neither derives its origin from Europe nor America? We do not know. But in the midst of uncertainty, if we may be allowed to conjecture, we suspect that contagion to have come from Guinea, or some other equinoctial country of Africa. The very learned English physician Sydenham was of this opinion (z), and it is strengthened by what is affirmed by Battista Fulgoso, an eye-witness of the beginning of the French evil in Europe. He says, in the work which we have already cited (a), that the French evil was brought from Spain into Italy, and from Ethiopia into Spain. Astruc pretends that Fulgoso means America, under the name of Ethiopia.

(y) It appears, that this author has confounded the French evil with the scurvy; for we know that Dr. Giulio Rondoli Pefarese, a famous physician of Sierra, affirmed to a person of credit, that amongst many who were thought infected with the French evil, and whom he cured, he had not found any who was really infected with that distemper; but that all were scorbutic, and that he had succeeded in curing them, by using the remedies for the scurvy.

(z) Sydenham affirms in one of his letters, that the French evil is as foreign to America as to Europe, and that it was brought there by the Moors from Guinea; but it is not true, that the Moors brought it to America, for the distemper was known before they were brought to Hispaniola.

(a) *Quæ pestis (ita enim visa est), primo ex Hispania in Italiam allata ad Hispanos ex Æthiopia, brevi totam terrarum orbem comprehendit. Fulgo. Dict. Paſtorumque Memorab. lib. i. cap. 4.*

Ethiopia. This is a curious method of solving a difficulty. But who ever called Ethiopia America? We know, on the contrary, that it was common among the authors of that century, to give the name of Ethiopia to any country inhabited by black men, and to call such men Ethiopians; so that the natural sense of the words of Fulgoso is, that the French evil was brought from the equinoctial countries of Africa into Lusitanian Spain, or Portugal; but this we dare not take upon us to maintain, unless we had made more enquiries, and obtained stronger proofs from authors of faith and authenticity.

THE END.









